

**Transcriptional Changes in the Breast Muscle of Thermally Challenged
Turkey Poults**

A Thesis

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Dedication

I dedicate this to my friends and family who helped me get through this new territory
in my life.

Abstract

Thermal stress in poultry causes reduction in growth, impaired meat quality, and increased mortality. Growth selected and very young birds are especially susceptible. To investigate the transcriptional pathways involved in thermal stress we looked at the breast muscle (an economically important muscle group) of 1-day old turkey poults from a fast growth selected line and a related slow growing line. These young birds were brooded at one of 3 temperatures for 3 days: control (35°C), hot (39°C), or cold (31°C). RNA was isolated from the breast muscle after treatment and euthanasia. 28 libraries were sequenced for analysis (average 18 million reads per library). The reads were mapped to the current turkey genome assembly and analyzed for differential expression. As expected, the fast growing line responded differently to thermal stress than the slow growing line. It had a greater number of differentially expressed genes belonging to pathways that included: transcriptional control and ubiquitination. The slow growing line's affected pathways were almost exclusively lipid metabolism. There are no shared differentially expressed genes or pathways between the two lines. This divergence in response is highlighted by comparing the two lines at each temperature as well as there are more differentially expressed genes between the lines at the treatment temperatures than at the control temperature.

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Chapter 1 - Literature Review

1.1 Problem/Significance

Agriculture is threatened by climate change [1]. As climate change progresses, increases in both the average temperature and the number of extreme temperature days are predicted [2]. This threatens livestock and poses significant economic impacts. For example, the turkey industry alone has an estimated worth of \$4.84 to \$5.45 billion (2013 USDA-NASS Turkey Industry report). Annual economic losses due to heat stress in the turkey industry were estimated in 2003 to be \$14.351 million with optimal abatement. In the larger Broiler and Layer industries estimated losses were \$51.9 million and \$61.4 million, respectively [3]. Losses due to cold stress are typically not estimated. However, fuel costs for heating barns increases input costs for the producer and cold stress increases susceptibility to disease, which would lead to further indirect costs [4].

1.2 Muscle Basics

The primary product derived from turkeys, in the United States, is meat. Meat is, of course, skeletal muscle. Skeletal muscle is a complex tissue composed of adipose, nerve tissue, satellite cells, and muscle fibers. Muscle fibers are elongated, post-mitotic, multinucleated cells that house the contractile proteins and physically shorten to contract the muscle. These fibers are connected to nerves via a motor end plate, which allows the nerve to trigger muscle contraction.

Satellite cells are a muscle-specific stem cells located between the basement membrane and sarcolemma of skeletal muscle fibers [5]. Satellite cells are active during the post hatch/birth period and are critical during muscle repair and growth, but are otherwise quiescent [6]. In cell culture, these cells appear to be multi-potent and can be induced to follow myogenic, osteogenic, or adipogenic developmental pathways [7,8]. There is some debate as to the multi-potential nature of satellite cells as it may be mesenchymal stem cells that differentiate into non-myogenic fates[9,10]. However, it does appear that multi-potential cells are present in muscle, be they categorized as satellite cells or mesenchymal stem cells.

Embryonic muscle development begins with an undifferentiated mesodermal cell. Those destined to be a muscle cells differentiate into myoblasts. Several myoblasts fuse together to form myotubes. These myotubes continue expressing and assembling proteins into their contractile units until the myotube becomes an adult fiber. The fiber type (fast vs slow) is determined by the type of motor neuron that enervates it during maturation of the muscle fiber [11]. After birth or hatch, muscle growth is mediated by an increase in fiber width (hypertrophy), not number (hyperplasia). To increase the fiber size the satellite cells proliferate, differentiate, and fuse with the existing muscle fibers to add nuclei [12].

Muscle repair recapitulates many of the steps found in development. But first, the damaged, degenerated fiber is infiltrated by macrophages (and a smaller number of other infiltrates such as neutrophils). This infiltration is required for regeneration to

proceed. The infiltrating inflammatory cells are normally blood-borne and thus require adequate muscle vascularization. Therefore, if circulation is also damaged or poor, new fibers cannot be generated. Satellite cells divide and a subset of them differentiate into myoblasts which fuse together to form the new myotubule within the old fiber's basal lamina. Then, like in development, the myotubule matures into an adult fiber. The remaining satellite cells become quiescent again until needed [11,12]. Researchers have observed that selection for large and fast-growing birds has primarily resulted in large muscle fibers without a commensurate increase in vascularization; this may make cooling, removal of waste products, and tissue regeneration more difficult for those birds [13].

1.3 Stress

Stress is often defined, in biological terms, as the activation of the Hypothalamic-pituitary-adrenal (HPA) axis and the release to stress hormones such as cortisol or corticosterone. In this paper a more general understanding of stress is used and is referred to as thermal stress, but HPA axis activation has not been confirmed. By this definition, thermal stress occurs when the ambient temperature deviates to a degree where the animal is negatively affected. This can occur at both hot and cold temperatures. Thermal stress in poultry leads to reduced meat quality, reduced growth, and increased mortality [14–16].

1.4 Heat Stress:

Heat stress has a number of deleterious effects on poultry including reduced feed intake, reduced overall growth, and increased mortality [14,15]. Although, heat stress partially reduces growth due to reduced feed consumption, it also contributes more directly to reduced growth as studies in chickens have found that heat-stressed birds are smaller than pair-fed controls raised at normal temperatures [14]. Heat stress during the end of the growth period or shortly before slaughter also appears to increase the incidence of pale, soft, and exudative (PSE) meat [17].

Many processes in the body generate heat, among them are digestion, metabolism, and movement. Under hyperthermic conditions, poultry reduce blood flow to heat-generating organs such as the duodenum, jejunum, pancreas, and breast muscle [18]. Also, poultry lack sweat glands and rely on panting for most of their evaporative cooling [19]. To facilitate heat dissipation birds can also increase blood flow to some areas of their skin – particularly areas that have less feather coverage [18].

Heat-stressed birds may exhibit a repatriation of fat in muscle. One study in broilers, found an increase in intermuscular fat in leg muscle, increased lipid content in breast muscle, and increased subcutaneous fat [15]. Lu and colleagues [14], using a different fast-growing breed of chicken, found no change in intermuscular fat of the leg muscle in heat-stressed birds compared to controls. However, there was an increase in intermuscular fat in the heat-stressed birds relative to their pair-fed thermal controls.

Slow-growing lines of poultry appear to be less affected by heat stress than faster growing lines [14]. This may be due to the differences in muscle fiber size and

vasculature ratio described above. Given that the number of muscle fibers is fixed post-hatch, increasing the number of fibers prehatch may allow for greater vascularization within the same sized muscle as opposed to having large muscle mass due to very large fibers alone. Embryonic manipulation may increase the number of fibers at hatch in breast muscle [20]. If this can be applied to other muscle groups, it could be a useful tool. Other studies in chickens have found that similar manipulations of the incubation temperature can lead to larger muscle mass [21] or adaptation to heat stress post hatch [22].

1.5 Cold Stress:

Endotherms respond to reduced ambient temperature by activating catabolic metabolism to generate energy for heat generation. In poultry, this is facilitated by increased circulating Non-Esterified Fatty Acids (NEFA) and increased mitochondria in skeletal muscle (gastrocnemius) [23,24]. Skeletal muscle is a major thermogenic organ (shivering and non-shivering thermogenesis) in birds and poultry appear to depend heavily on muscle to generate heat [25]. One potential mechanism for skeletal non-shivering thermogenesis is the uncoupling of the proton gradient from ATP synthesis. Poultry lack the mammalian uncoupling proteins 1 and 2 which are the ubiquitous and brown fat specific isoforms, respectively [26]. Cold-induced thermogenesis in brown adipose is mediated by uncoupling proteins (UCPs) which are mitochondrial anion carriers [27]. Poultry do have a *UCP3* ortholog (avian uncoupling protein, avUCP), which is skeletal muscle and liver specific. The uncoupling activity of this protein may play a

direct role in thermogenesis or a supportive role in minimizing oxidative damage, although, these functions are not mutually exclusive [23].

Other antioxidants are also increased by cold stress including T-AOC, GSH-Px, SOD, and IL-2 [28]. Despite protective mechanisms, evidence of oxidative stress - increased levels of malondialdehyde (MDA) - has been found in the gastrocnemius, spleen, bursa, duodenum, and thymus of cold stressed young poultry [28,29]. Histological analysis revealed damage in the duodenum of cold stressed chicks [29]. The mechanism is not yet known, but cold stress also increases the incidence of dark, firm, and dry muscle (DFD) [30,31]. Cold stress also can lead to increased mortality and reduced growth [16].

Very young birds are particularly susceptible to thermal stress and cannot maintain their body temperature when under even relatively mild cold stress [24]. However, mild cold treatment during this time of development can lead to later resistance to cold stress. Chicks exposed to cold treatment days 3 and 4 post-hatch showed improved resistance later to 24hr cold stress as indicated by reduced stress hormones and reduced body temperature relative to non-conditioned controls [32].

1.6 Transcriptomics

The transcriptome is the complete set of RNA transcripts that can be found in a given cell. Early efforts to investigate the transcriptome via mRNA-clone sequencing were inefficient due to high expense per sample and low throughput. Microarrays (a hybridization technique) allowed for higher throughput, but required prior knowledge of

gene sequences to generate gene-specific probes. In contrast, RNA-Seq is a sequencing-based method not dependent on known sequences [33].

RNA-Seq starts with a cDNA library generated from the RNA sample of interest. These cDNA fragments are amplified and deeply sequenced. The short sequences (“reads”) can then either be assembled “*de novo*” by computer algorithms, or can be aligned with a previously sequenced and annotated genome. There are many applications of RNA-Seq and the technique can be used to investigate the structure of genes, find new unannotated genes, and investigate non-mRNA species (ex. ncRNA). In the following study RNA-seq is used to investigate changes in the level of expression of known genes within turkey skeletal muscle.

1.7 Hypothesis/goal of the study

This study is part of a series of inter-related studies that combine *in vivo* and *in vitro* experiments on thermal stress in turkeys. The goal is to identify key gene pathways that are altered during thermal stress. Understanding the mechanisms that underlie thermal stress will inform the development of mitigation strategies to enhance bird health and to produce a better meat product even in the face of climate change. This study investigates *in vivo* transcriptional changes in the breast muscle of young turkeys of both a fast and a slow-growing lines. This will allow better elucidation of the mechanisms at play in thermal stress and the differences in response between growth-selected lines.

Chapter 2 - Transcriptional Changes in the Breast Muscle of Thermally Challenged

Turkey Poults

2.1 Introduction

Climate change directly affects the incidence of thermal stress in livestock [1]. Thermal stress occurs when the ambient temperature sufficiently deviates such that the animal is negatively affected. This occurs at both hot and cold temperatures. In addition to the predicated increase in mean temperature, the frequency of extreme temperature days is also increasing due to climate change [2]. While all livestock can be negatively affected, poultry, particularly young birds, are especially susceptible.

Unlike mammals, poultry lack sweat glands and therefore rely on panting, behavioral changes, and altered blood flow to cool themselves. Although this likely contributes to their susceptibility to thermal stress, there may also be underlying genetic and gene expression causes [18,19]. Heat stress in poultry leads to decreased meat quality, altered adiposity, reduced growth, and increased mortality [14,15]. Fast-growing lines are more susceptible to heat stress relative to slow-growing lines [14]. Like heat stress, cold stress also results in reduced growth and increased mortality [16]. Cold stress leads to oxidative stress in the gastrocnemius muscle and, by unknown mechanisms, and increase in dark, firm, and dry (DFD) meat [28–31]. Young birds are less able to maintain their body temperature and therefore are more sensitive to cold induced thermal stress [24].

Muscle is likely a major source of non-shivering thermogenesis in birds [25]. Birds and other non-mammalian vertebrates lack thermogenic brown adipose tissue and the ubiquitous and brown fat-specific isoforms of uncoupling protein (UCP 1 and 2)

[26]. Uncoupling proteins (UCPs) are mitochondrial anion carriers responsible for cold-induced thermogenesis in brown adipose tissue [27]. However, birds do have a muscle and liver-specific isoform *UCP3* (sometimes called avUCP in birds). Evidence suggests that this protein plays a role in thermogenesis and minimizes oxidative damage [23]. Therefore, understanding the response to thermal stress in avian muscle is an important aspect of understanding thermal stress as a whole.

This study belongs to a series of interconnected studies that investigate the effects of thermal stress (*in vivo* and *in vitro*) on muscle growth and development in young turkeys. This study is designed to investigate the *in vivo* transcriptional changes in the breast muscle of thermally challenged young turkey poults and compares the responses between two related turkey lines with differing rates of growth.

2.2 Materials and Methods

2.2.1 Animals and Sample Collection

Two lines of turkey were used in this study. The randombred control 2 (RBC2) is a relatively slow-growing line maintained by the Poultry Research Center of The Ohio Agricultural Research Development Center at The Ohio State University. This line has been propagated without conscious selection for any trait and is similar to a bird of the 1950s [34]. The second line, F line, is a faster growing line derived from the RBC2 via single trait selection for body weight at 16 weeks of age [35].

Poults were hatched at Ohio State University and immediately transported by automobile to Michigan State University, a trip of approximately four hours. Hatchlings were randomly assigned ($n = 6$) to temperature treatment groups and brooded at one of three temperatures: the control temperature (35°C), the cold temperature (31°C), or the hot temperature (39°C). After 3 days of thermal challenge, the birds were euthanized via cervical dislocation and the pectoralis major muscle was removed, snap frozen in liquid nitrogen and stored at -80°C until RNA isolation.

2.2.2 RNA Isolation, Library prep, and Sequencing

Total RNA was isolated from each sample by extraction with TRIzol (Ambion, Inc., Foster City, CA). Samples were DNase treated (Turbo DNA-free™ Kit, Ambion, Inc., Foster City, CA) and stored at -80°C. RNA integrity was confirmed on the 2100 Bioanalyzer (Agilent Technologies, Santa Clara, CA). RNA Integrity Number ranged from 7.6 to 9.6. Multiple samples (4 - 6) were sequenced from each treatment group. Indexed libraries ($n = 30$) were constructed with the TruSeq RNA Sample Preparation Kit version 2 (Illumina, Inc., San Diego, CA) at the University of Minnesota Genomics Center. Libraries were multiplexed, pooled and sequenced on the HiSeq 2500 (Illumina, Inc., San Diego, CA) to produce 125-bp paired-end reads. Data are deposited in the NCBI's Gene Expression Omnibus repository as SRA BioProject 419215.

2.2.3 Data Analysis

Sequencing adapters were removed and low quality bases were trimmed using Trimmomatic [36] using the “-q” option and 3’ end trimming requiring a minimum Q30. Raw sequence data was quality checked FastQC [37]. Mapping of the trimmed reads was performed via Bowtie (v2.2.4.0) using the turkey genome (UMD 5.0, NCBI Annotation 101). After alignment, read counts were normalized to the average library size (18,788,823 reads) in CLC Genomics Workbench (CLCGWB v. 8.0.2, CLC Bio). Genes were initially considered detected if they had any mapped reads. Euclidean sample distances were used to perform hierarchical clustering in CLCGWB based on single linkage. Venn diagrams of expressed genes compared between treatments were generated using the online tool Venny (<http://bioinfogp.cnb.csic.es/tools/venny/index.html>) and BioVenn (<http://www.biovenn.nl/index.php>).

In both the hierarchical clustering heat map and the principal component analysis (PCA) plot two samples from the RBC2 line brooded at 39°C were identified as outliers (samples 1 and 2). To check that the reported reads matched the relative abundances of RNA in these two samples a “semi-quantitative PCR” experiment was developed. In short, cDNAs were generated and serial dilutions of the samples were used to amplify by PCR several gene transcripts from the outliers and select other samples to compare detection thresholds and thus RNA quantities. For controls, sample 1 from the 35 °C brooded RBC2 group and sample 4 from the 39 °C brooded F-line group

were selected. These controls were chosen to best represent the read counts from the non-outlier samples and to include each treatment temperature and line in at least one of the controls.

Using an aliquot from the same RNA samples submitted for sequencing, cDNA was synthesized using the USB First strand cDNA synthesis kit for Real Time PCR (Affymetrix, USB). Each cDNA sample was serially diluted 1:10 seven times resulting in DNA concentrations ranging from 50 ng/ul to 5×10^{-6} ng/ul. Three genes were selected for analysis; *HPRT* had a relatively equal number of by-total normalized reads per sample (602 to 1,410 normalized reads), *GAPDH* had 19-fold lower by-totals normalized read counts in 39R2 than 39F4, and *GSTA3* had 145-fold difference between 39R2 and 39F4. With differences of this magnitude the dilutions at which these genes could be detected via PCR were expected to differ by one to two dilutions (ie. a 10 to 100-fold change).

The following primers were used for qPCR: *GSTA3*, Forward:

CTTGAAGGAGAGAGCCCTGAT and Reverse: T TTCTCCTTGCCTCAGGTG; *GAPDH*,

Forward: AGTCGGAGTCAACGGATTTG and Reverse: CATCTGCCCACTTGATGTTG; and

HPRT. Forward: AACAGTGACAAGTCAATCCCCATGA and Reverse:

GCAACGTTTTTCATTGTTTTCC. The PCR cycle included an initial denaturation of 30 sec at 95°C then 35 cycles of 30 sec at 94°C, 30 sec at 58°C, and 30 seconds at 72°C finishing with 10 min at 72°C and 15°C hold until removal. Results were visualized in 2% agarose with ethidium bromide.

2.2.4 Expression analysis

Differential gene expression [DGE] analysis was performed on the raw reads for each comparison in CLC Genomics Workbench (CLCGWB v. 8.0.2, CLC Bio) using the TMM statistical model from the edgeR package for R. This generates fold changes and FDR adjusted p-values for each gene comparison. The resulting gene lists were then filtered for significance (FDR corrected p-value < 0.05) and fold change (≥ 2.0).

Significant DEGs were used to investigate gene pathways using Ingenuity Pathway Analysis (IPA, Qiagen Bioinformatics, Redwood City, CA) and the PANTHER

Overrepresentation Test (GO Consortium release 20150430, [38];

<http://geneontology.org/>) was used to test for gene enrichment. GO analysis utilized the reference gene set of the chicken (*Gallus gallus*). Comparing the turkey reference gene list (21,009) to that of the chicken found direct matches for 9,965 gene IDs. To improve ID mapping in IPA, where possible the nearest human/mouse homolog was used as a gene ID for annotated turkey genes listed as “LOC” numbers.

2.3 Results

2.3.1 Sequencing and Outliers

Thirty libraries were paired-end sequenced and the resulting reads mapped to the turkey genome (UMD 5.0, annotation 101). Experiment-wide reads per library averaged 18,439,293 (range = 11,557,573 to 38,504,484) and Q-scores were consistent across the samples (average 37.6%). Average read mapping exceeded 86% and 81.3% of

the reads concordantly mapped. The estimated mean library insert size, based on map positions, was 195.9bp and was consistent across groups (Table 1).

The PCA plot (Figure 1) and the hierarchical clustering (dendrogram) showed no clear grouping of samples by treatment group or genetic line. Two samples (39R1 and 39R2) were uniquely placed outside of the treatment groups in the dendrogram and were isolated from the other samples in the PCA plot (Figure 1). Both divergent samples belonged to the RBC2 (slow) 39°C (hot) treatment group. The uniqueness of these samples could not be attributed to sample quality as the RNA integrity numbers (RIN) and sequence read quality scores (FastQC) for these outliers were similar to the other samples (Table 1). However, read counts for many genes differed drastically from those of the other libraries with no clearly discernable patterns. For example, in all but one sample (39R2) the sequence reads mapped to *EMP1* (epithelial membrane protein 1) ranged from approximately 300-1700 reads (Figure 2a) but 39R2 had over 200,000 mapped reads. Similarly, reads corresponding to *ASB15* (Ankyrin repeat and SOCS box protein 15), ranged between 600 and 2500 for most samples, but 39R2 had zero reads (Figure 2b).

A PCR sensitivity test was done using a dilution series of cDNA on three representative genes to test the mRNA concentrations of 39R1 and 39R2 relative to other samples. Included were *GSTA3* (Glutathione S-transferase A3), *GAPDH* (Glyceraldehyde-3-phosphate dehydrogenase), and *HPRT* (Hypoxanthine-guanine phosphoribosyltransferase). The dilution series ranged from 50 ng/ul of cDNA to 5×10^{-6} .

Using this series, the detection threshold (no visible band after PCR) of each gene was expected to be within the range of dilutions. As shown in Table 2, PCR products were detectable through 5×10^{-2} ng/ul.

GSTA3 products in the non-outliers and 39R1 were detected through 0.5 ng/ul and for the remaining outlier (39R2) was detected through 5×10^{-2} , or one more dilution than the others (Figure 3). The 120 to 145-fold difference observed in the read counts between outliers and non-outliers in *GSTA3* expression (Figures 3-4a and Table 2) would have been detectable for at least two more dilutions in the 39R2 sample if the reads were accurate. However, products were only detected to one more dilution. *GAPDH* products were detected in all samples through 5×10^{-2} ng/ul, only 39R2 (outlier) differed in subjective intensity at the final detectable dilution (Table 2). The 19-fold difference in read counts between 39R2 and the other samples (Figure 4b and Table 2) would have resulted in detectable gene product in at least one additional dilution in 39R2 than in the non-outliers. *HPRT* products were similarly detected through 5×10^{-2} ng/ul in all samples. Band intensity was variable between samples, but only 35R1 (a non-outlier) differed from the others in intensity at the last detected concentration (Table 2). Expression of *HPRT* showed no difference between detection thresholds in any samples (Table 2). *HPRT* read counts predicted little difference between outliers and non-outliers (Table 2 and Figure 4c). The results of this experiment suggest that the unusual RNA-seq results for the two outliers were not reflective of mRNA quantity and likely were caused

by problems in library preparation, amplification or sequencing and these samples were consequently removed from further analysis.

Analysis of the remaining 28 paired-end libraries found the average experiment-wide number of reads was 18,788,823 and the range was unchanged. The Q-scores were consistent across libraries as were read mapping percentages (Table 3). Removal of the outlying samples did not result in clustering of the samples by treatment or genetic line in the PCA plot (Figure 5) or the hierarchical clustering dendrogram (Figure 6). However, the slight trend in the PCA of the F line having less spatial variation than the RBC2 line, was more apparent in the PCA without the outliers.

2.3.2 Gene Expression

On average, 17,803 genes were detected per sample, defined as having at least one mapped sequence read. To eliminate spurious detection, genes were defined as being “expressed” when the average number of reads for that gene in a treatment group exceeded 4.0 after normalizing to the number of reads per library. Under this criterion, the average number of expressed genes per treatment group was 16,572 (Table 4). There were 15,862 expressed genes shared among all treatments (Appendix 1). Within each line, at least 94% of the expressed genes were shared among the temperature treatments (Table 4) and each treatment had 1% or less of the expressed genes unique to that group (Figure 7 a-b). When gene expression is compared at each temperature between lines, 96% of the expressed genes were shared and 2% were unique to that treatment group (Table 4, Figure 8 a-c).

Gene expression patterns were characterized using IPA and GO analyses. The number of genes that reached the existing threshold was greater than allowed for IPA analysis, therefore the threshold was set to maximize the number of genes included in the IPA analysis. Using a normalized read count threshold of 193 yielded 11,936 genes across treatment groups for IPA analysis. The five most significant canonical pathways were shared across treatment groups and included, Protein Ubiquitination, EIF2 Signaling, NRF2-mediated Oxidative Stress Response, Regulation of eIF4 and p70S6K Signaling, and mTOR signaling.

PantherGO analysis found the expressed genes shared between all treatments were significantly enriched for 249 Biological Processes, 57 Molecular Functions, and 95 Cellular Components. The five most significant ontology terms in each category were primarily related to ribosomes and their function. The Biological Process category included peptide biosynthetic process (GO:0043043), ribosome biogenesis (GO:0042254), translation (GO:0006412), amide biosynthetic process (GO:0043604), and ribonucleoprotein complex biogenesis (GO:0022613). The fold enrichment for these ranged from 1.62 to 1.65. The Molecular Function category included structural constituent of ribosome (GO:0003735), ubiquitin-like protein ligase binding (GO:0044389), ubiquitin protein ligase binding (GO:0031625), RNA binding (GO:0003723), and protein kinase binding (GO:0019901) with fold enrichment ranging from 1.51 to 1.73. The enriched Cellular Component ontology terms were cytosolic ribosome (GO:0022626), ribosomal subunit (GO:0044391), large ribosomal subunit

(GO:0015934), ribosome (GO:0005840), ribonucleoprotein complex (GO:1990904) (Table 5).

2.3.3 Temperature Effects

Temperature effects were examined in four pairwise within-line comparisons in which the experimental temperature groups were compared to that line's control temperature group. The groups were CS = cold-treated, slower-growing (RBC2), HS = heat-treated, slower-growing; CF = cold-treated, fast-growing (F-line); and HF = heat-treated, fast-growing (Appendix 2). These within-line comparisons identified up to 81 DEGs (FDR adjusted p-value of <0.05 , Table 4) with a total of 52 with Log_2 fold change > 2.0 among the four temperature comparisons (Figure 9). The CS comparison had just three DEGs, and only one with $\text{Log}_2\text{FC} > 2.0$. HS (heat-treated slow-growing vs control) had four DEGs and three with $\text{Log}_2\text{FC} > 2.0$. In contrast, temperature treatments of the fast-growing F-line birds had a greater number of DEGs. CF (cold-treated fast growing vs control) had 24 DEGs (16 with $\text{Log}_2\text{FC} > 2.0$) and HF (hot-treated fast growing vs control) had 81 DEGs (47 with $\text{Log}_2\text{FC} > 2.0$) (Table 4). In the HF and CF comparisons, most DEGs were upregulated while in the HS and CS comparisons the majority were down regulated. Only the HF and CF comparisons shared DEGs; no DEGs were shared between the F and RBC2 lines.

2.3.3.1 The slow-growing line responded to thermal stress with down regulation of lipid metabolism genes

2.3.3.1.1 Hot (39°C) versus control (35°C) brooded slow-growing poult

Hot-brooded slow-growing poult s had three significant DEGs relative to the control poult s (Figure 9). These DEGs included *PLIN1* [perilipin 1], *LOC104916674* [outer dense fiber protein 3- like (*ODF3B*)], and *ACACB* [acetyl-CoA carboxylase beta] (Appendix 2). *PLIN1* and *ACACB* were down regulated ($\text{Log}_2\text{FC} = -5.05$ and -3.41 , respectively), whereas *LOC104916674* (*ODF3B*) was up regulated ($\text{Log}_2\text{FC} = 4.06$). Little is known regarding the function of *ODF3B* and the description of the mammalian homolog available at NCBI only noted function in the flagella of sperm. The gene is widely expressed but function in other tissues has not been described. In general, *PLIN1* and *ACACB* are both highly related to lipid metabolism. In humans, *PLIN1* plays a role in lipid storage and in chickens mutations in *PLIN1* correlated to changes in carcass traits and adiposity [39,40]. IPA analysis found association of *PLIN1* with the Adipogenesis Canonical Pathway, which regulates the formation of adipocytes from pluripotent mesenchymal stem cells. These stem cells can also differentiate into osteoblasts, chondrocytes, and myocytes.

ACACB is noted to be associated with fatty acid synthesis. In IPA, it was associated with two Canonical Pathways: Biotin-carboxyl Carrier Protein Assembly and AMPK Signaling pathways (Figures 10 and 11). The Biotin-carboxyl Carrier Protein Assembly pathway is a biosynthetic pathway in which *ACACB* (and/or a related gene *ACACA*) catalyzes a forward and reverse reaction carboxylating the biotinylated biotin-carboxyl-carrier protein dimer (Figure 10). The AMPK (AMP Activated Protein Kinase) pathway is a master metabolic control pathway which controls both energy production

and lipid metabolism. Both *PLIN1* and *ACACB* had statistically significant functional connections in the Small Molecule Biochemistry category of IPA. These connections were almost exclusively related to lipid metabolism but also included three glucose metabolism functions. These functions suggest reduction to lipolysis of fat, accumulation of lipid droplets and triacylglycerol. Association of *ACACB* suggests increase in quantity of ketone body, oxidation of fat, and oxidation of glucose. Together *PLIN1* and *ACACB* may decrease synthesis and storage of lipid. Both also had a connection to lipolysis of adipocytes, but acting in opposite directions. *PLIN1* is suggested to decrease lipolysis, whereas *ACACB* is suggested to increase lipolysis. (Figure 12). Overall these results would be consistent with a hypothesis of appear to be increasing lipid breakdown and reducing the synthesis and storage of lipid.

2.3.3.1.2 Cold (31°C) versus control (35°C) brooded slow-growing poult

The CS comparison had only one significant DEG (*LOC104911020* [serum amyloid A protein (*SAA1*)-like]) that was down regulated with a Log2 fold change (Log2FC) = -6.55 (Appendix 2 and Figure 9). *SAA1* is involved in lipid metabolism, response to inflammation, and even host defense. As a component of the High Density Lipoprotein (HDL) *SAA1* plays a role in cholesterol homeostasis [36]. Based on IPA, down regulation of this gene is predicted to result in reduction of phospholipid and cholesterol. In mammals, *SAA1* is found in high levels in serum during both acute and chronic inflammation. It is associated in IPA with the Acute Phase canonical pathway, which is triggered by events that include infection and injury (Figure 13) [36].

2.3.3.2 The fast-growing line responded to thermal stress with alterations in transcriptional regulation and ubiquitination

2.3.3.2.1 Hot (39°C) versus control (35°C) brooded fast-growing poult

The HF comparison had 47 DEGs (Table 5) that could be divided into four major functional categories (ubiquitination, gene expression related, ATP metabolism, and ncRNAs). Most of these genes (42) were up regulated by the heat treatment. Fourteen of the DEGs were in common with the CF comparison (Table 6, Figure 9) where they shared both direction and approximate magnitude of change.

Five ubiquitination-related genes were highly up regulated in this comparison ($\text{Log}_2\text{FC} > 6$ and up to 10). These included *LOC104914735* [E3 ubiquitin-protein ligase *NEDD4*-like] ($\text{Log}_2\text{FC} = 6.87$), *LOC100548372* [ubiquitin-conjugative enzyme E2 R2-like] ($\text{Log}_2\text{FC} = 10.14$), *LOC100303669* [ubiquitin-associated protein 2] ($\text{Log}_2\text{FC} = 8.96$), *LOC104915386* [ubiquitin-associated protein 2-like] ($\text{Log}_2\text{FC} = 8.17$) and *KCMF1* [potassium channel modulatory factor 1] ($\text{Log}_2\text{FC} = 9.80$) (Appendix 2). The human homologs of these loci are *NEDD4*, *UBE2R2*, *UBAP2*, *UBAP2L*, and *KCMF1* respectively. IPA associated *NEDD4* and *UBE2R2* with the generalized Ubiquitination Canonical Pathway involved in the degradation of short-lived proteins which are associated with a variety of cell processes including cell cycle, apoptosis, transcription regulation, and cell surface reception. In this pathway *NEDD4* belongs to the E3 ligase group and *UBE2R2* to the E2 ligase group (Figure 14). The human version of *UBE2R2*, when phosphorylated by the kinase CK2, enhances beta-catenin degradation. The function of *UBAP2* has not

been determined, but in humans it contains a UBA-domain that is characteristic of proteins that function in the ubiquitination pathway [41]. KCMF1 is not yet well characterized, but shows E3 ligase activity [42]. In addition to being an E3 ligase, *NEDD4* (turkey *LOC104914735*, $\text{Log}_2\text{FC} = 6.87$), is also associated with the IGF-1 Signaling Canonical pathway, along with *RASA1* (*LOC104915780*, $\text{Log}_2\text{FC} = 8.03$) (Appendix 2). Both up-regulated genes would enact inhibition on an incoming signal from IGF-1. *NEDD4* inhibits the IGF-1 receptor and inhibits its transcription while *RASA1* inhibits the signal several steps downstream from the IGF-1 receptor (Figure 13). This signaling cascade promotes cellular proliferation and growth [43].

In the category of genes that modulate the expression of other genes (turkey genes whose human homologs played a role in gene expression), significant expression changes were seen in 8 DEGs at $\text{Log}_2\text{FC} \geq 6$. These included, *LOC104916269* [methyl-CpG-binding domain protein 2-like (*MBD2*)], *LOC100544528* [mothers against decapentaplegic homolog 2 (*SMAD2*)], *NIPBL* (several annotated loci), *RASA1* (2 loci), *CHD1* (2 loci), *SPIN1* [spindlin-W-like], and *LOC104915749* [heterogeneous nuclear ribonucleoprotein K-like (*HNRNPK*)] (Appendix 2). *MBD2-like* (turkey *LOC104916269*, $\text{Log}_2\text{FC} = 6.53$) is a protein that binds to methylated DNA to repress gene expression at methylated promoters (Appendix 2) [44,45]. However, it is also reported to have demethylation activity which would activate a previously methylated gene. *MBD2* is associated with the IPA DNA Methylation and Transcriptional Signaling Canonical Pathway and the transcription and activation of DNA endogenous promoter network

(Figure 14). *SMAD2* (turkey *LOC100544528*, $\text{Log}_2\text{FC} = 7.48$) is a transcription repressor that inhibits the transcription of TGF-beta, thereby regulating other processes such as proliferation, apoptosis, and differentiation. In muscle *SMAD2* is a negative regulator of growth [43].

RASA1 (RAS p21 protein activator 1) is a negative regulator of the Ras system [46]. *RASA1* is in the IGF-Signaling canonical pathway (Figure 13) and functions to stimulate GTPase activity of RAS p21 thereby modulating the expression of other genes. In this pathway *RASA1* and *NEDD4* inhibit the signal from IGF-1 as it enters the cell. *RASA1* does so by inhibiting the RAS protein.

Nipbl is a chromosome binding protein that is associated with developmental regulation, sister chromatid cohesion, chromosome condensation, and DNA repair. *NIPBL* in the turkey genome is annotated as eight Nipped-B-like loci. All but two of the nipped-b-like loci are adjacent on the Z chromosome and the two exceptions are assigned to ChrUN (unknown chromosome). Five loci *LOC100544159*, ($\text{Log}_2\text{FC} = 7.54$), *LOC100544628* ($\text{Log}_2\text{FC} = 6.57$), *LOC104914844* ($\text{Log}_2\text{FC} = 6.34$), *LOC104916829* ($\text{Log}_2\text{FC} = 8.34$), and *LOC104914843* ($\text{Log}_2\text{FC} = 6.14$) were significantly upregulated, whereas the remaining three were not significantly DE (Appendix 2).

Two DE loci were annotated as chromatin helicase, both were up regulated in this dataset. *LOC100539580* ($\text{Log}_2\text{FC} = 6.85$) and *LOC104915190* ($\text{Log}_2\text{FC} = 7.13$) were up regulated (Appendix 2). The first is annotated as *CHD1* and the second *CHD1L*. *CHD1* is member of the CHD family that is characterized by chromos and SNF2-related

helicase/ATPase domains and that alter gene expression (Figure 14) [47]. It shares several key sequence motifs with the human *CHD1L*, suggesting that it also plays a role in DNA torsion and chromatin formation [48].

There were thirteen DEGs in the HF comparison annotated as uncharacterized ncRNAs. Eleven are up regulated with the remaining two being down regulated (Appendix 2). These are RNA molecules not translated into proteins, and have not been validated for function. Three of these were shared with CF (Table 6).

2.3.3.2.2 Cold (31°C) brooded versus control (35°C), fast-growing poult

The CF comparison had 16 DEGs. Like HF comparison, most (12) were upregulated and only 4 down regulated. CF shared 14 DEGs with HF, only 2 DEGs were unique to CF (Figure 9 and Table 6). The shared genes belonged to the same major categories found in the HF comparison (ubiquitination, genes that modulate the expression of other genes, ATP synthesis, and ncRNAs). As noted above, these 14 genes shared both direction and approximate magnitude of change in the CF comparison as seen for the HF comparison. The two unique DEGs, *CHAC1* and *COL10A1*, do not belong to the categories found in HF. *CHAC1* [ChaC glutathione-specific gamma-glutamylcyclotransferase 1] ($\text{Log}_2\text{FC} = -3.15$, Appendix 2) belongs to the γ -glutamyl cycle and catalyzes one of the steps in this cycle. This cycle has functions in cellular growth and proliferation as well as cell to cell signaling. In humans, this gene has been shown to promote neuronal differentiation by deglycation of the Notch receptor, to inhibit Notch signaling that promotes proliferation [50]. *COL10A1* (collagen, type X, alpha 1)

was also down regulated ($\text{Log}_2\text{FC} = -2.62$, Appendix 2) in the CF comparison. In humans, *COL10A1* encodes a short chain collagen (the alpha chain of type X collagen) and is expressed by hypertrophic chondrocytes [51].

Of the five ubiquitination-associated genes discussed in the HF comparison above, 2 were also significant in the CF comparison. *LOC100548372* [ubiquitin-conjugating enzyme E2 R2-like (*UBE2R2*)] had $\text{Log}_2\text{FC} = 9.31$ in CF (10.14 in HF). The second gene *KCMF1* [potassium channel modulatory factor 1] was significantly upregulated with $\text{Log}_2\text{FC} = 8.67$ in the CF comparison (9.80 in HF) (Table 6) [42]. Similarly, two of the genes that impact gene expression identified in the HF comparison were also significant in the CF comparison. *LOC104915749* [heterogeneous nuclear ribonucleoprotein K-like (*HNRNPK*)] was up regulated $\text{Log}_2\text{FC} = 9.12$ in CF (9.57 in HF) (Table 6). The human homolog of this gene influences pre-mRNA processing and is mostly found in the nucleus of the cell. IPA suggests that upregulation of HNRNPK also has an activating effect on transcription of RNA via “activation of DNA endogenous promoter”. *LOC10055084* [spindlin-W (*SPIN1*)-like] also up regulated in both HF and CF ($\text{Log}_2\text{FC} = 9.84$ and 8.92 respectively, Table 6) is predicted to have a function in transcription of RNA and specifically rRNA [49].

The two ATP metabolism-associated DEGs were both annotated as “ATP synthase subunit alpha, mitochondrial-like” or *ATP5A1*. *LOC100545914* had $\text{Log}_2\text{FC} = 7.98$ in CF (9.57 in HF), whereas the log_2 fold change of *LOC104915436* was 8.13 in CF (HF = 9.70) (Table 6). Human *ATP5A1* is a subunit of the ATP synthase complex. ATP-

synthase is a mitochondrial protein complex that utilizes the proton gradient from the electron transport chain to synthesize ATP. The other ATP synthase genes were not significantly DE.

Finally, three ncRNA loci were among the DEGs in the CF comparison shared with HF comparison. Two of these three are highly up regulated ($\text{Log}_2\text{FC} \geq 8$) and one was down regulated ($\text{Log}_2\text{FC} = -2.7$, Table 6).

2.3.4 Line Effects

To better understand the interaction between brooding temperature and line effects, comparisons between the lines at each brooding temperature were also generated treating the relatively slow-growing line (RBC2) as the control compared to the relatively fast-growing F line. In the between-line comparisons the number of shared expressed genes ranged from 16,215 to 16,300 (Table 4). At the control temperature (35°C), 119 genes reach statistical significance, but only 29 had $\text{Log}_2\text{FC} > 2.0$. At the hot temperature (39°C) there were 94 DEGs (57 with $\text{Log}_2\text{FC} > 2.0$). The cold temperature (31°C) comparison had greatest number of DEGs (761) with 78 having $\text{Log}_2\text{FC} > 2.0$ (Table 4).

A total of 148 genes combined showed significant expression differences between the lines (Figure 15). Of these, 133 were unique to individual temperature comparisons. One gene *REC8* (*meiotic recombination protein REC8 homolog*), was significant in all three line comparisons. In the control and cold temperature comparisons, this gene was upregulated ($\text{Log}_2\text{FC} = 2.96$ and 2.25 , respectively). This up

regulation was much greater in the hot temperature comparison ($\text{Log}_2\text{FC} = 6.88$) than the other two comparisons. The human homolog as a key member of meiotic cohesion complex that regulates recombination and this gene is required during meiosis for separation of sister chromatids and homologous chromosomes [52]. Its expression in turkey poult muscle tissue suggests an alternate function for this gene in avian tissue. In addition to *REC8*, 9 were shared between cold and control comparisons. These included ACACB [acetyl-CoA carboxylase beta], LOC104913729 [myosin heavy chain, skeletal muscle-like], LOC104913900 [endogenous retrovirus group K member 113 Gag polyprotein-like], LOC104917305 and LOC100540610 [myelin-oligodendrocyte glycoprotein-like], LOC100550693 [glycine receptor subunit alpha-3], and LOC104911627 and LOC100541679 [uncharacterized loci]. Three genes were shared between the hot and cold (*LOC104909502*, *LOC104910825*, *LOC100548376*), and 3 between the cold and hot comparisons (Figure 15).

Overall, the between-line comparisons had DEGs belonging to a diverse set of functions and categories including ncRNAs, ubiquitination, neuronal/nerve related genes, membrane associated, transcriptional control, structural, and metabolic processes. At the control temperature (35°C) the DEGs were largely comprised of ncRNAs but also included membrane, contractile and lipid metabolism associated proteins (Appendix 2). At the cold temperature (31°C), expression between the lines differed primarily at transcriptional regulators, genes related to inflammation and immunity, lipid metabolism, structural and contraction proteins, as well as

axon/neuronal proteins. At the hot temperature (39°C) DEGs were associated primarily with ubiquitination, transcriptional regulation, metabolism (lipid, ATP, and alcohol), and membrane associated or channel proteins. All three comparisons had a set of ncRNAs, with few shared among them.

The control comparison represents the basal differences between the lines before applying a temperature treatment. Comparison between lines at the control temperature found 29 total DEGs; 10 up regulated and 19 down regulated (Appendix 2, Figure 15). Among the most differentially expressed were *SAA1*, *MOG*, *TRHR*, two ncRNAs, *ODF3B*, and *GLRA3*. The functions of *SAA1* and *ODF3B* were discussed previously in the Temperature Effects section above. *MOG*, *ODF3B*, *GLRA3*, and *TRHR* are all membrane associated proteins, *GLRA3* and *TRHR* are both receptor proteins and *TRHR* [thyrotropin-releasing hormone receptor] is a g protein-coupled receptor.

The between-line comparison for heat-treated birds had 57 DEGs. Unique at this temperature was a greater number of up regulated genes (50) than down regulated (7) (Table 5, Figure 15). This comparison highlights the differential response between lines at a hot brooding temperature attributable to growth selection and included 51 unique DEGs. Included in the 51 unique DEGs were genes belonging to several already discussed categories such as ubiquitination (*UBE2R2*, *UBAP2*, *UBAP2L*, *NEDD4*, and *KCMF1*), gene expression modulators (*SPIN1*, *HNRNPK*, *RASA1*, *NIPBL*, *CHD1*, *MBD2*, and *SMAD2*), metabolism (*ATP5A1*), and ncRNAs (11 loci). Except for several of the ncRNAs, these genes were among the up-regulated DEGs (Appendix 2).

The between-line comparison for cold-treated birds had 78 DEGs (Appendix 2, Figure 15). Like the control temperature comparison, more genes were down-regulated (53) in the fast-growing F-line than up-regulated (25) (Appendix 2). This comparison highlights the differential response of cold brooding temperature attributed to growth selection and included 66 unique DEGs. Included in these unique DEGs were *COL9A1* [collagen, type IX, alpha 1], *UCP3* [mitochondrial uncoupling protein 3], *RUNX1* [runt-related transcription factor 1], *CLIP2* [cartilage intermediate layer protein 2], *PDK4* [pyruvate dehydrogenase kinase, isozyme 4], and several ncRNAs (Appendix 2).

When comparing the two lines brooded at cold temperatures, IPA predicted directional change (z-score) for several small molecule biochemistry functions (Figure 16). There were 9 genes associated with these functions including *ACACB*, *ACACB4*, *ADRB2*, *GALR3*, *MTTP*, *NUAK2*, *PDK4*, *RUNX1*, and *UCP3*. All were down regulated except for *RUNX1*. Together these genes were associated with an increase in the quantity of steroid, concentration of cholesterol, concentration of triacylglycerol, and oxidation of long chain fatty acid. They were also associated with the predicted reduction in concentration of lipid, fatty acid, and D-glucose. Several of the DEGs if acting alone would predict the opposite effect from the aggregate prediction predicted change (Figure 16).

2.4 Discussion

The most striking result of this study was the lack of common responses to thermal stress between lines. That is, there was no clear “response to heat” or “response to

cold". Response to thermal stress should be evolutionarily conserved. Therefore, differences between the F and RBC2 lines were expected to be primarily seen as differences in the degree of response in common genes/pathways. Instead, the transcriptional response of breast muscle observed within lines was generally a response to deviating from the normal temperature, regardless of direction that was shared between temperature treatments within a line.

We also expected a cohort of genes to be shared among the between-line comparisons that would represent those constitutively responding to thermal challenge, regardless of temperature treatment. Surprisingly, there was only one DE gene shared between the lines and among treatments, *REC8*. The homologous human gene is a member of the meiotic cohesion complex. Although muscle does not undergo meiosis, it does contain mitotic stem cells that are active in developing muscle. The role of *REC8* in this tissue is unclear and the function clearly has yet to be fully elucidated.

2.4.1 Responses to Heat Stress

Although heat-stressed poultry reduce their feed intake [14,15], cells still need an energy source. The down regulation of *PLIN1* and *ACACB* seen in the slow-growing turkey poults of this study is likely the result of increased use of stored lipid as an energy source. As *PLIN1* forms part of the lipid droplets in cells and *ACACB* catalyzes the synthesis of malonyl-CoA that inhibits fatty acid oxidation, these changes would likely correlate to increased fatty acid oxidation and decreased lipid storage. However, these genes may not function the same in turkeys as in mammals. For example, turkeys (and

chickens) respond to insulin very differently than mammals and leptin in chickens may have a more localized activity than found in mammals; both of these genes indirectly influence *ACACB* expression or activity [53,54].

In addition to changes in energy metabolism, studies on heat stress often find changes in adiposity [14,55]. *ACACB* and *PLIN1* mouse knockout models are lean and protected from obesity [56–58]. In chickens, mutations in *PLIN1* have been correlated to differences in adiposity and carcass traits [39]. However, the study by Lu and colleagues [14] found no change in muscle adiposity in their slower growing line of chickens and only a slight decrease in their fast-growing line. In addition to the species differences this study differed from our turkey study in that it examined chickens much closer to market age and thermally stressed for a longer period of time (week 5 to 8 post hatch). Piestun et al [55] used a post hatch protocol more similar to ours with broiler chickens (a fast-growing commercial variety) and found an increase in the number of lipid-stained muscle cells in the pectoralis muscle at days 8 and 13 post hatch, which is opposite to what our data would predict. This could be due to the age differences or the thermal stress protocol (longer, more variable) or to differences between turkeys and chickens or differences in the pathway, regulation post-transcription.

Two parallel studies of the same lines of turkeys by our laboratory and collaborators, found *ACACB* to be up regulated in proliferating muscle satellite cells ($\text{Log}_2 \text{FC} = 2.11$) [59]. However, in differentiating satellite cells from RBC2 under a heat treatment, this gene was down regulated ($\text{Log}_2 \text{FC} = -2.27$) [60]. Differentiating cells are

likely to behave more like whole muscle, but perhaps proliferating cells may be inhibiting the carnitine shuttle to allow a buildup of acetyl-CoA for use in the synthesis of membranes in new satellite cells. Another deleterious effect of heat stress on poultry is reduced growth in poultry, an affect that appears to be more apparent in fast-growing lines [14,15]. The heat-treated fast-growing poult in this study had several up-regulated DEGs that inhibit growth in mammals. The E3 ligase, NEDD4, has been associated with muscle atrophy and is also an inhibitor of IGF-1 growth signaling [43]. RASA1 is also an IGF-1 signal inhibitor and both were up regulated in the HF comparison (Figure 13). The transcription factor *SMAD2* was also up regulated in HF and it mediates the signaling of myostatin - a muscle growth inhibitor from the TGF-beta superfamily [43].

In addition to IGF-1 inhibition, NEDD4 is a part of the ubiquitination pathway and is only one of several ubiquitination-associated DEGs in this study. In mammals, ubiquitination is the process in which the small protein ubiquitin is covalently attached to the lysine residue of another protein. This ubiquitin “tag” can then be a signal for several other processes. The most commonly discussed function of ubiquitination is protein degradation by the proteasome, but this is not the only outcome. In proteins with more than one lysine the location of the ubiquitin or the number of ubiquitinated lysines can determine the result. In addition, ubiquitin itself has multiple lysine residues allowing for differently structured ubiquitin chains [61]. For example, a poly-ubiquitin chains attaching to the 48th lysine (Lys-48) are the specific marker for proteasome degradation [62]. Single ubiquitin and chains of ubiquitin can then be recognized by

proteins with ubiquitin-binding domains [63]. Various forms of ubiquitination have been associated with DNA repair/DNA damage tolerance, regulation of histone function, gene expression, receptor endocytosis, proteasome degradation, kinase activation, and signal transduction. The different types of ubiquitination are catalyzed by different ligases [61].

In this study, the heat-treated F-line had five ubiquitination-associated genes differentially expressed. These genes were up regulated with $\text{Log}_2\text{FC} > 6$ in both F-line comparisons. As a regulatory protein, ubiquitin is found in almost all animal tissues and is “ubiquitously” expressed; it was not however, DE in this comparison. Although the specific targets and downstream effects in turkeys are not known, the number of ubiquitin ligases and ubiquitin-associated genes suggests further study into the function of ubiquitination proteins in avian muscle, particularly under thermal stress is needed; as the capacity for ubiquitination appears to be greatly increased in these fast-growing birds.

The DEG with the greatest fold change in this entire study was the ubiquitination gene *UBE2R2* (turkey *LOC100548372*) with a $\text{Log}_2\text{FC} > 10$ in the HF comparison (and > 9 in CF). In mammals, this gene is a ubiquitin-conjugating enzyme and it forms lys-48 poly-ubiquitin chains, which as noted above, label a protein for proteasome degradation [62]. This very large change in expression may predict an increase in the level of protein degradation via the proteasome in fast-growing thermally stressed turkey poults,

regardless if the stress was due to heat or cold. This is not unexpected given the likelihood of muscle damage in thermally-stressed birds.

In chickens, early heat exposure, not unlike the treatment in this study, actually lead to increased resistance to heat stress later in life [22]. This early stress can also lead to increased muscle mass [21]. In the present study, a few of the DEGs found in the fast-growing line may help mediate these long-term responses. *MBD2* (turkey *LOC104916269*, $\text{Log}_2\text{FC} = 6.53$) is part of the methylation process. Although the specific targets of MBD2 are not yet known in turkeys, methylation could produce long term effects by modulating gene expression [44,45].

Several ncRNAs were DE in the heat-treated fast-growing F line turkeys. For example, the HF comparison of the present study shared one DEG with proliferating muscle satellite cells (ncRNA locus, *LOC104910702*) [59]. This locus was down regulated in both studies ($\text{Log}_2\text{FC} = -2.40$ and -2.66 , respectively). Interestingly, this same locus was also DE in the between-line heat-treatment group comparisons of the hatchling muscle and the differentiating muscle satellite cells ($\text{Log}_2\text{FC} = -2.40$ in muscle and -4.35 in differentiating cells, respectively)[60]. Currently the specific activity of the ncRNA is not known.

2.4.2 Responses to Cold Stress

Endotherms like poultry respond to cold ambient temperatures with increased catabolic metabolism. None of the DEGs in the cold temperature treatment were

directly associated with this effect. Only a single gene, *SAA1*, component of HDL, was significantly altered (down regulated the CS comparison). This is important however, as HDL is part of the system that circulates lipids throughout the body. Based on the DEGs found in comparison between the lines, IPA predicted the F-line would have increased concentration of cholesterol and triacylglycerol, and increased oxidation of long chain fatty acids. Also predicted was a decrease in the concentration of lipids, fatty acids, and d-glucose (Figure 16). These changes in small molecule biochemistry may be indirectly related to changes in catabolic metabolism.

Cold stress can lead to oxidative muscle damage[28,29] as evidenced by genes that respond to protein damage. In the F-line *UBE2R2* (turkey *LOC100548372*) was massively up-regulated ($\text{Log}_2\text{FC} > 9$) and, as previously discussed, is specific to tagging proteins of proteasome degradation, allowing for breakdown of proteins damaged by oxidative processes [62]. *UCP3* (turkey *LOC100303663*) was down-regulated ($\text{Log}_2\text{FC} = -2.61$) in the F-line relative to the RBC2 line at the cold brooding temperature. This may reflect a difference in the stability of the two lines to tolerate thermal stress as *UCP3* may play a role in reducing oxidative stress and generating heat[23].

Cold-stressed animals often show reduced growth compared to those reared under normal conditions [64]. The cold-treated fast-growing (F line) poult showed down regulation of *CHAC1* [ChaC glutathione-specific gamma-glutamylcyclotransferase 1] ($\text{Log}_2\text{FC} = -3.15$, Appendix 2) a gene that in humans constrains cell proliferation by inhibiting Notch signaling [50]. This is in contrast to cold-stressed proliferating satellite

cells from the f-line, that showed up regulation of *CHAC1* ($\text{Log}_2\text{FC} = 3.19$) [59] suggesting increased inhibition of Notch signaling and increased proliferation.

The between-line comparisons of cold-treated proliferating satellite cells and live poult shared the DEG *LOC104915725* [mitochondrial ribosome-associated GTPase 1-like] which was up-regulated in both ($\text{Log}_2\text{FC} = 2.64$ in proliferating cells and 2.93 in live poult). This gene is involved in mitochondrial ribosome assembly [65]. They also shared *LOC100548579* [myosin-7B-like (*MYH7B*)] that was down regulated in proliferating satellite cells ($\text{Log}_2\text{FC} = -2.41$) but up regulated in the live poult ($\text{Log}_2\text{FC} = 2.56$). Also, shared as DE was *MUC3A*, down regulated in both poult and differentiating satellite cells ($\text{Log}_2\text{FC} = -4.98$ and -6.22 , respectively) [60]. In humans, this gene is a transmembrane mucin-type glycoprotein that is expressed in the small intestine [66]. The function in muscle is not described.

The cold-treated poult *PK4* (pyruvate dehydrogenase kinase, isozyme 4) was down-regulated in the fast-growing versus the slow-growing poult with $\log_2\text{FC} = 3.74$. *PK4* is of particular interest as it was found to be dysregulated in turkeys with pale, soft, and exudative (PSE) meat [67]. *PK4* is a member of the PDK/BCKDK protein kinase family and contributes to the regulation of glucose metabolism [68]. This kinase phosphorylates the the pyruvate dehydrogenase complex, thereby inhibiting the conversion of pyruvate, produced from the oxidation of glucose and amino acids to acetyl-CoA [69]. Expression of this gene is regulated by glucocorticoids, retinoic acid

and insulin [70]. Interestingly PDK4 functions to decrease metabolism and conserve glucose and is upregulated in mammals during hibernation [71].

2.5 Conclusions

In turkey poult s there appears to be a greater transcriptional response to heat than to cold as the heat treatment had a greater number of DEGs than the cold treatment for both genetic lines (Table 4 and Figure 9). Also, although the direction of the expression changes of the shared F-line DEGs were similar, the fold change in the heat treatment group was always greater than for the cold treatment (Table 6). This greater response is likely due to the greater range of behavioral adaptations the turkey poult s could use in response to cold. When hot, poult s primarily use panting, changes in circulation, or metabolic changes to keep cool. Because they were brooded in groups, the cold-treated birds in this study could behaviorally respond by huddling together, in addition to shivering and non-shivering thermogenic responses. To a lesser extent, the heat-treated poult s could individually mitigate some of the heat stress by moving to a cooler area of the brooder.

Broadly speaking, the slow-growing RBC2 line responded to thermal stress almost exclusively with lipid-related DEGs. Both temperature treatments suggested a reduction in lipid storage, transport, or synthesis, consistent with changes in energy metabolism to maintain body temperature. In contrast, the fast-growing F-line responded to thermal stress through changes in genes (ubiquitination and gene expression modulators) that would influence the levels of other gene products

downstream (ie ubiquitination and gene expression). The downstream effects of these genes are not well described in turkeys however, the F line had DEGs that in mammals would result in reduced muscle growth.

Tables

Table 1. Summary of RNA-seq data for the 30 sequenced muscle libraries. For each library, the total number of reads, median read qualities (R1 and R2), percentage of aligned and concordant reads, mean and standard deviation of estimated insert length (bp) and the number of observed genes are given.

Temp °C	Line	Sample	Number of Reads (unfiltered)	Median Read Quality 1	Median Read Quality 2	% Aligned Reads	% Concordant Reads	Est Insert Mean	Est Insert std deviation	Detected genes
31	F	31F1	14,114,500	37.7	37.6	86.7	80.8	208	37	17752
		31F2	15,229,280	37.7	37.6	86.9	80.9	208	37	17778
		31F3	11,914,246	37.7	37.6	87.0	81.1	207	38	17601
		31F4	12,485,612	37.6	37.7	86.7	80.7	208	38	17669
		Average	13,435,910	37.7	37.6	86.8	80.9	207.7	38	17700
	R	31R1	28,172,291	37.5	37.5	86.8	82.2	171	22	18082
		31R2	27,569,101	37.5	37.5	86.6	82.1	170	22	18331
		31R3	38,504,484	37.6	37.5	87.2	82.7	170	22	18587
		31R4	24,155,877	37.4	37.4	86.2	81.5	171	22	18087
		31R5	28,059,489	37.4	37.4	86.2	81.5	171	22	18290
		31R6	27,003,936	37.5	37.5	86.5	81.8	171	22	18099
		Average	29,430,947	37.5	37.5	86.5	81.9	170.7	22	18266

39	F	35F1	12,585,532	37.6	37.6	86.9	80.9	207	38	17401
		35F2	12,346,027	37.6	37.6	87.4	81.6	208	37	17603
		35F3	13,649,854	37.6	37.6	87.0	81.1	208	38	17705
		35F5	14,231,959	37.7	37.6	87.0	81.0	208	38	17772
		Average	13,203,343	37.6	37.6	87.1	81.2	207.7	38	17620
	R	35R1	12,099,611	37.7	37.6	85.5	79.2	210	41	17266
		35R2	12,349,023	37.7	37.6	86.4	80.3	210	39	17430
		35R3	32,300,197	37.6	37.5	87.0	82.3	173	23	18395
		35R4	34,025,919	37.5	37.5	86.1	81.3	173	23	18426
		35R5	28,086,170	37.5	37.4	87.0	82.6	172	23	18335
		35R6	27,985,454	37.6	37.5	86.6	81.9	173	23	18006
		Average	30,599,435	37.6	37.5	86.7	82.0	172.7	23	18291
39	F	39F1	12,198,243	37.6	37.7	87.4	81.7	207	37	17514
		39F2	12,435,596	37.7	37.6	86.5	80.4	208	39	17448
		39F3	13,835,178	37.7	37.6	86.7	80.8	207	38	17815
		39F4	11,930,921	37.6	37.5	85.4	79.1	207	40	17285
		Average	12,599,985	37.7	37.6	86.5	80.5	207.2	39	17516
	R	39R1	13,793,033	37.5	37.6	87.2	81.2	209	39	17797
		39R2	13,298,703	37.7	37.6	90.1	84.9	209	39	17545
		39R3	11,862,225	37.7	37.6	87.1	81.2	208	39	17549

	39R4	11,557,573	37.6	37.6	86.5	80.4	208	40	17293
	39R5	12,974,063	37.7	37.6	87.2	81.5	208	38	17459
	39R6	12,424,680	37.6	37.6	86.8	80.8	210	38	17509
	Average	12,204,635	37.7	37.6	86.9	81.0	208.5	39	17453
	Experimenta I Mean	18,439,293	37.6	37.5	86.8	81.3	195.9	33	17794.3

Table 2. Summary of RNA-seq data for the 28 muscle libraries used for final analysis. For each library, the total number of reads, median read qualities (R1 and R2), percentage of aligned and concordant reads, mean and standard deviation of estimated insert length (bp) and the number of observed genes (mapped reads > 1) and expressed genes (mean group normalized read count > 4) are given.

Temp °C	Line	Sample	Number of Reads (unfiltered)	Median Read Quality 1	Median Read Quality 2	% Aligned Reads	% Concordant Reads	Est Insert Mean	Est Insert stddev	Detected genes	Expressed Genes
31	F	31F1	14114500	37.7	37.6	86.7	80.8	208	37	17752	
		31F2	15229280	37.7	37.6	86.9	80.9	208	37	17778	
		31F3	11914246	37.7	37.6	87.0	81.1	207	38	17601	
		31F4	12485612	37.6	37.7	86.7	80.7	208	38	17669	
		<i>Group average</i>	<i>13435909.5</i>	<i>37.7</i>	<i>37.6</i>	<i>86.8</i>	<i>80.9</i>	<i>207.7</i>	<i>38</i>	<i>17700</i>	<i>16626</i>
	R	31R1	28172291	37.5	37.5	86.8	82.2	171	22	18082	
		31R2	27569101	37.5	37.5	86.6	82.1	170	22	18331	
		31R3	38504484	37.6	37.5	87.2	82.7	170	22	18587	
		31R4	24155877	37.4	37.4	86.2	81.5	171	22	18087	
		31R5	28059489	37.4	37.4	86.2	81.5	171	22	18290	
		31R6	27003936	37.5	37.5	86.5	81.8	171	22	18099	
		<i>Group average</i>	<i>28910863</i>	<i>37.5</i>	<i>37.5</i>	<i>86.6</i>	<i>82.0</i>	<i>170.7</i>	<i>22</i>	<i>18246</i>	<i>16613</i>

35	F	35F1	12585532	37.6	37.6	86.9	80.9	207	38	17401	
		35F2	12346027	37.6	37.6	87.4	81.6	208	37	17603	
		35F3	13649854	37.6	37.6	87.0	81.1	208	38	17705	
		35F5	14231959	37.7	37.6	87.0	81.0	208	38	17772	
		Group average	13203343	37.6	37.6	87.1	81.2	207.8	38	17620	16568
	R	35R1	12099611	37.7	37.6	85.5	79.2	210	41	17266	
		35R2	12349023	37.7	37.6	86.4	80.3	210	39	17430	
		35R3	32300197	37.6	37.5	87	82.3	173	23	18395	
		35R4	34025919	37.5	37.5	86.1	81.3	173	23	18426	
		35R5	28086170	37.5	37.4	87.0	82.6	172	23	18335	
		35R6	27985454	37.6	37.5	86.6	81.9	173	23	18006	
		Group average	24474395.7	37.6	37.5	86.4	81.3	185.2	29	17976	16545
39	F	39F1	12198243	37.6	37.7	87.4	81.7	207	37	17514	
		39F2	12435596	37.7	37.6	86.5	80.4	208	39	17448	
		39F3	13835178	37.7	37.6	86.7	80.8	207	38	17815	
		39F4	11930921	37.6	37.5	85.4	79.1	207	40	17285	
		Group average	12599984.5	37.7	37.6	86.5	80.5	207.3	39	17516	16553
	R	39R3	11862225	37.7	37.6	87.1	81.2	208	39	17549	
		39R4	11557573	37.6	37.6	86.5	80.4	208	40	17293	
		39R5	12974063	37.7	37.6	87.2	81.5	208	38	17459	
		39R6	12424680	37.6	37.6	86.8	80.8	210	38	17509	
		Group average	12204635.2	37.7	37.6	86.9	81.0	208.5	39	17453	16524
Experimental Mean		18788823	37.6	37.6	86.7	81.2	195.0	33	17803	16572	

Table 3. Summary of results of qPCR sensitivity test of gene expression. For each gene the sample tested, number of reads observed in the RNA-seq dataset, and dilutions tested are given. Relative intensity of the PCR product is denoted from +++ (highest) to – (negative). X denotes PCR failure. BTN = By-totals normalized.

Gene	Sample	BTN Reads	Dilutions (ng/ml)							
			50	5	0.5	5×10^{-2}	5×10^{-3}	5×10^{-4}	5×10^{-5}	5×10^{-6}
GSTA3	35R1	54	+++	++	++	-	-	-	-	-
	39F4	45	+++	++	++	-	-	-	-	-
	39R1	101	+++	++	++	-	-	-	-	-
	39R2	6,514	+++	+++	++	++	-	-	-	-
GAPDH	35R1	535,506	++++	++++	++++	+++	-	-	-	-
	39F4	586,364	++++	++++	++++	+++	-	-	-	-
	39R1	377,258	X	++++	++++	+++	-	-	-	-
	39R2	30,583	++++	++++	++++	++	-	-	-	-
HPRT	35R1	1,103	++++	++++	++	+	-	-	-	-
	39F4	1,060	++++	++++	+++	++	-	-	-	-
	39R1	1,410	++++	++++	++++	++	-	-	-	-
	39R2	602	++++	++++	+++	++	-	-	-	-

BTN (by totals normalized), read counts normalized between libraries based on the total number of reads. Suitable to compare counts within a gene.

+ represent the relative intensity of the bands with a single + being barely visible. - represents no visible band.

Blue are non-outlier samples, orange are the potential outliers

X= PCR failure

Table 4. Summary of gene expression and significant differential expression (DE) in pair-wise comparisons.

Comparison	Groups	Total Expressed Genes	Shared Genes	Unique to Group of interest	Unique to reference group	FDR p-value <0.05	Log ₂ FC > 2
Temperature	Slow Cold vs Ctrl	16834	16324	289	221	3	1
	Slow Hot vs Ctrl	16855	16215	310	330	4	3
	Fast Cold vs Ctrl	16918	16276	350	292	24	16
	Fast Hot vs Ctrl	16910	16211	342	357	81	47
Line	31°C F vs S	16939	16300	326	313	761	78
	35°C F vs S	16898	16215	353	330	119	29
	39°C F vs S	16917	16160	393	364	94	57

Table 5. Summary of PANTHER Overrepresentation Test of differentially expressed genes.

GO biological process complete	Fold enrichment	P- value
peptide biosynthetic process (GO:0043043)	1.65	1.27E-07
ribosome biogenesis (GO:0042254)	1.65	3.72E-04
translation (GO:0006412)	1.64	3.60E-07
amide biosynthetic process (GO:0043604)	1.62	2.16E-08
ribonucleoprotein complex biogenesis (GO:0022613)	1.62	1.91E-06
GO molecular function complete		
structural constituent of ribosome (GO:0003735)	1.73	1.26E-04
ubiquitin-like protein ligase binding (GO:0044389)	1.58	1.35E-03
ubiquitin protein ligase binding (GO:0031625)	1.57	1.80E-03
RNA binding (GO:0003723)	1.53	1.31E-21
protein kinase binding (GO:0019901)	1.51	2.28E-04
GO cellular component complete		
cytosolic ribosome (GO:0022626)	1.76	1.03E-02
ribosomal subunit (GO:0044391)	1.72	1.05E-04
large ribosomal subunit (GO:0015934)	1.71	2.07E-02
ribosome (GO:0005840)	1.71	3.38E-06
ribonucleoprotein complex (GO:1990904)	1.61	4.96E-16

Table 6. Shared DEGs between the two fast growing line comparisons. Fold change colors: green denotes down regulation, red up regulation. Relative intensity of color based on degree of change.

Feature ID	Mammalian Predicted Homologs	Description	Hot F-line		Cold F-line	
			Log ₂ Fold Change	FDR adjusted P-value	Log ₂ Fold Change	FDR adjusted P-value
LOC104910372	LOC104910372	uncharacterized LOC104910372 (ncRNA)	-2.93	4.67E-03	-2.65	1.47E-02
CILP2	CILP2	cartilage intermediate layer protein 2	-2.50	1.73E-07	-2.19	8.97E-07
LOC100542090	Myh3	myosin-3-like	3.45	2.10E-11	2.31	4.23E-09
LOC100548376	VCP	transitional endoplasmic reticulum ATPase	5.95	6.16E-06	4.98	1.11E-03
LOC104915925	Ska1	spindle and kinetochore-associated protein 1-like	8.53	1.41E-04	7.92	1.47E-02
LOC100545914	ATP5A1	ATP synthase subunit alpha, mitochondrial-like	9.57	6.69E-07	7.98	2.76E-04
LOC104915436	ATP5A1	ATP synthase subunit alpha, mitochondrial-like	9.70	1.32E-06	8.13	1.19E-03
LOC104916902	LOC104916902	uncharacterized LOC104916902 (ncRNA)	8.96	4.85E-05	8.24	3.68E-03
KCMF1	KCMF1	potassium channel modulatory factor 1	9.80	4.03E-06	8.67	2.07E-03
LOC104916705	LOC104916705	uncharacterized LOC104916705 (ncRNA)	10.10	3.03E-06	8.77	6.25E-03
LOC100544169	TXNL1	thioredoxin-like protein 1	10.05	1.37E-06	8.90	1.97E-04
LOC100550847	SPIN1	spindlin-W-like	9.84	3.03E-06	8.93	1.21E-02
LOC104915749	HNRNPK	heterogeneous nuclear ribonucleoprotein K-like	9.57	5.08E-06	9.13	5.89E-05
LOC100548372	UBE2R2	ubiquitin-conjugating enzyme E2 R2-like	10.14	2.57E-06	9.31	2.42E-04

Figures

Figure 1. Principal component analysis (PCA) of normalized RNA-seq read counts. **A.** All 30 samples. Sample to sample distances (within- and between-treatments) are illustrated for each dataset on the first two principle components. Samples are plotted according to treatment. **B.** Hierarchical clustering of 30 samples based on Euclidean distance reiterated relationships shown by PCA.

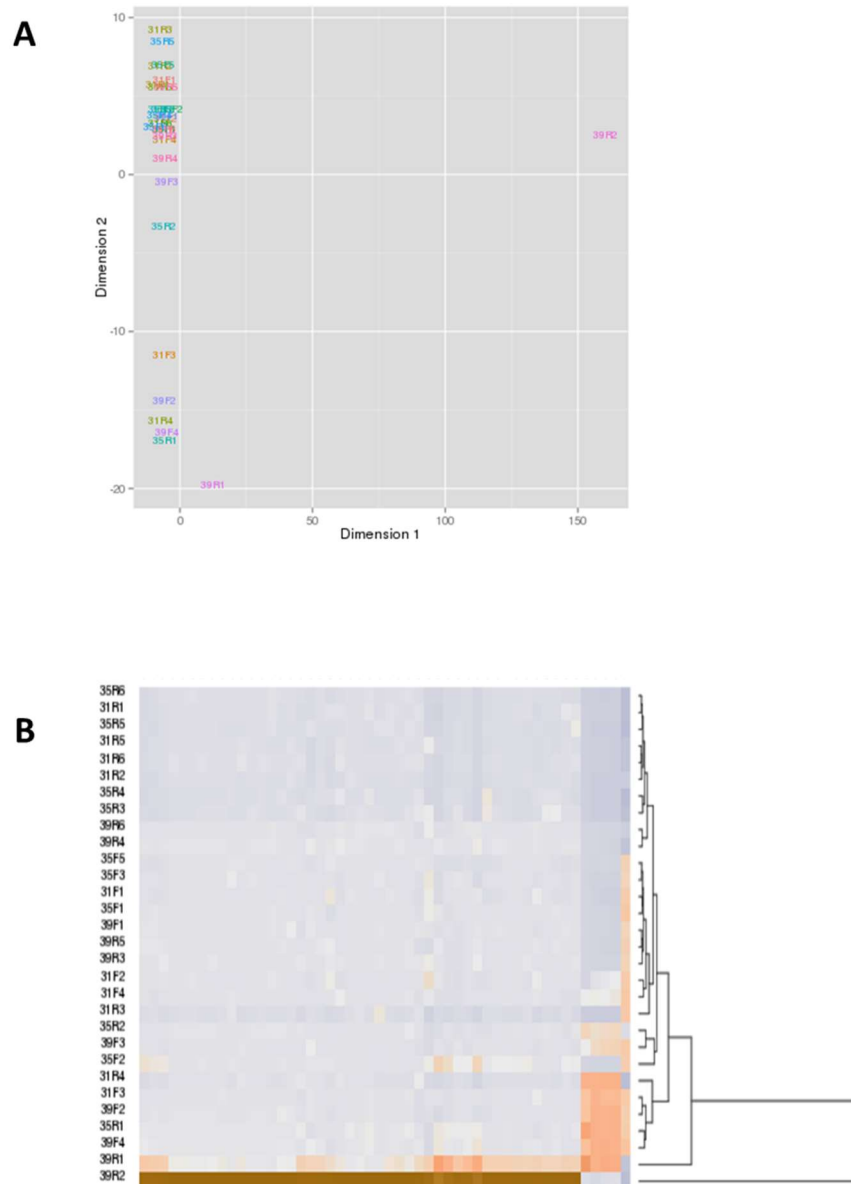


Figure 2. RNA-seq read counts demonstrating the discrepancy observed in the outliers.
A. RNA-seq read counts for *EMP1*. **B.** RNA-seq read counts for *ASB15*.

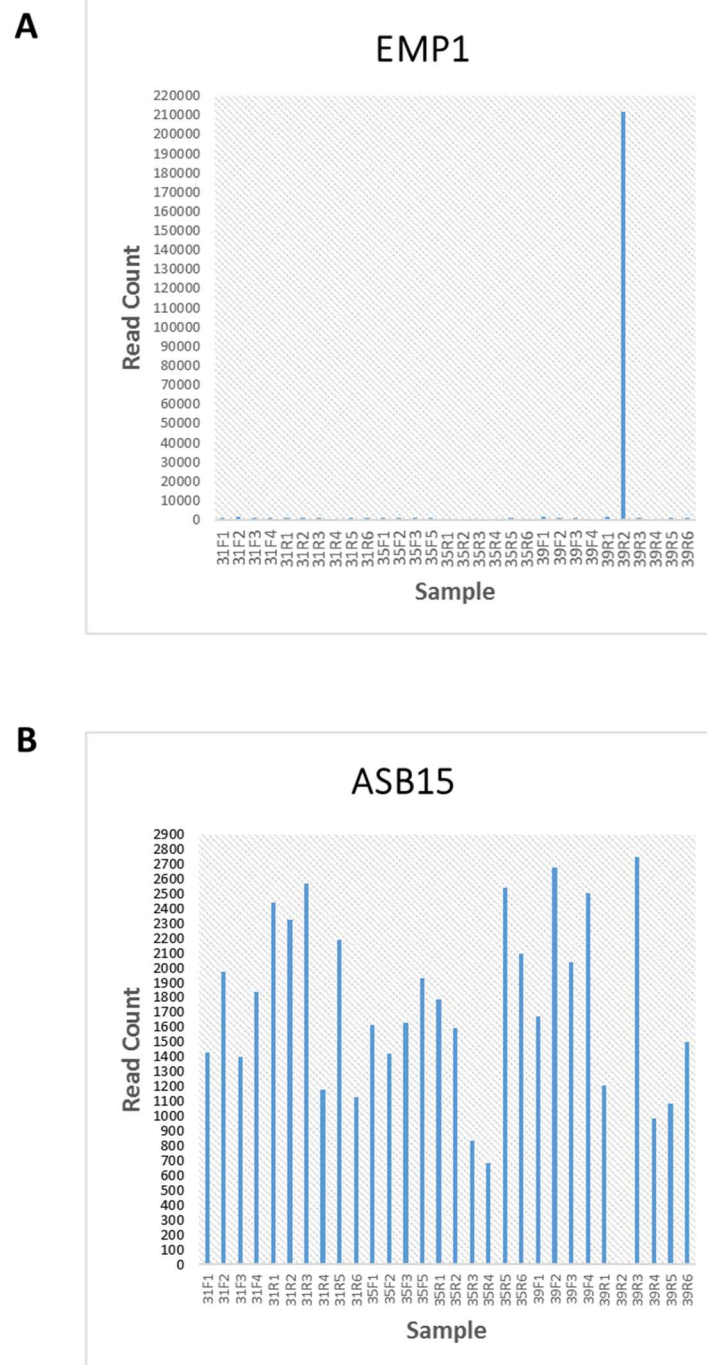


Figure 3. Example agarose gel image of qPCR products for *GSTA3* showing the similarity in expression levels between one outlier (39R2) and one typical sample (39F4).

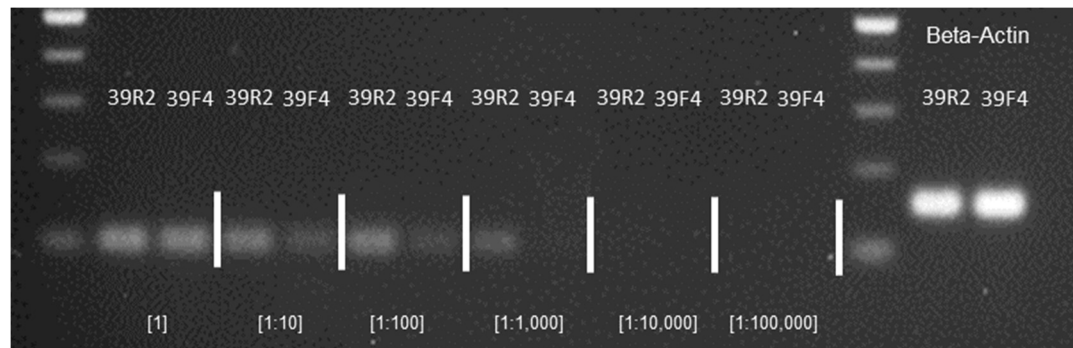


Figure 4. Normalized RNA-seq read counts for the three genes used in qPCR quantification. A. *GSTA3* B. *GAPDH* C. *HPRT1*.

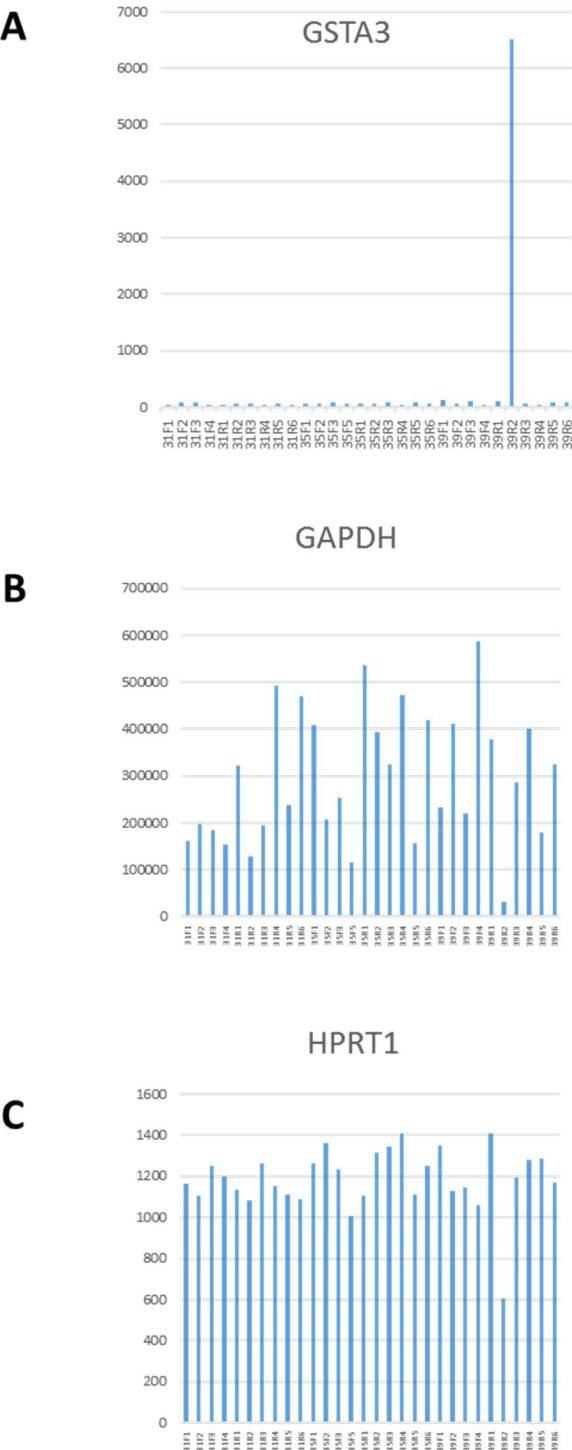


Figure 5. Principal component analysis of normalized RNA-seq read counts for the 28 samples used for final analysis. Sample to sample distances (within- and between-treatments) are illustrated for each dataset on the first two principle components. Samples are plotted according to treatment.

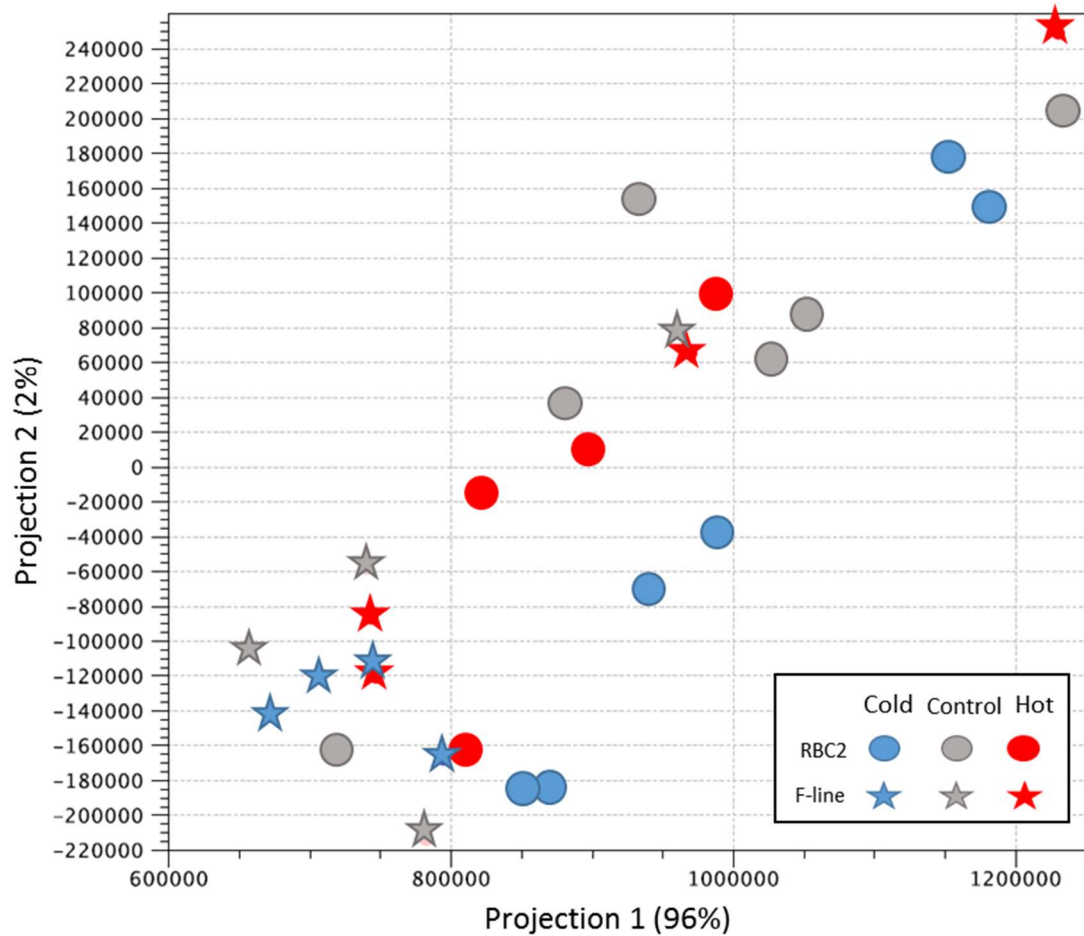


Figure 6. Hierarchical clustering of the 28 samples based on Euclidean distance reiterated relationships shown by PCA. The heat map below is based on experiment-wide normalized gene expression across all groups.

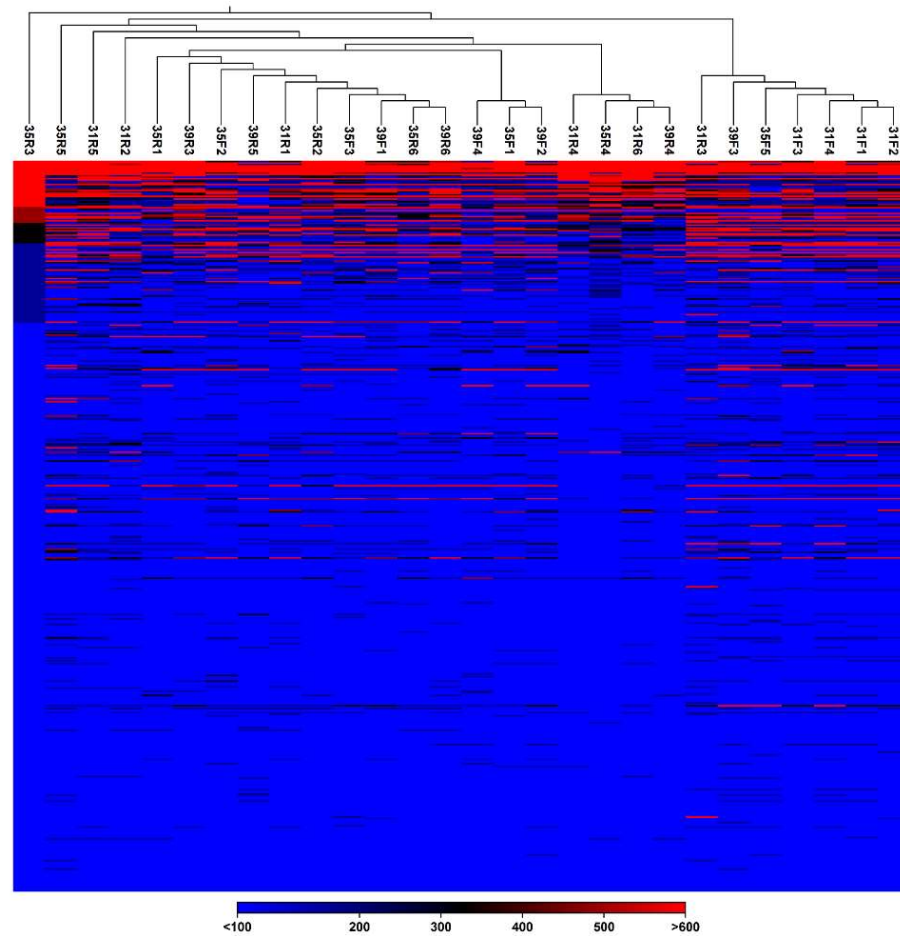


Figure 7. Distribution of expressed genes by line. A. Fast-growing F-line. B. Slow-growing RBC2 line. Genes were considered expressed if the average read count for the treatment group was > 4.0.

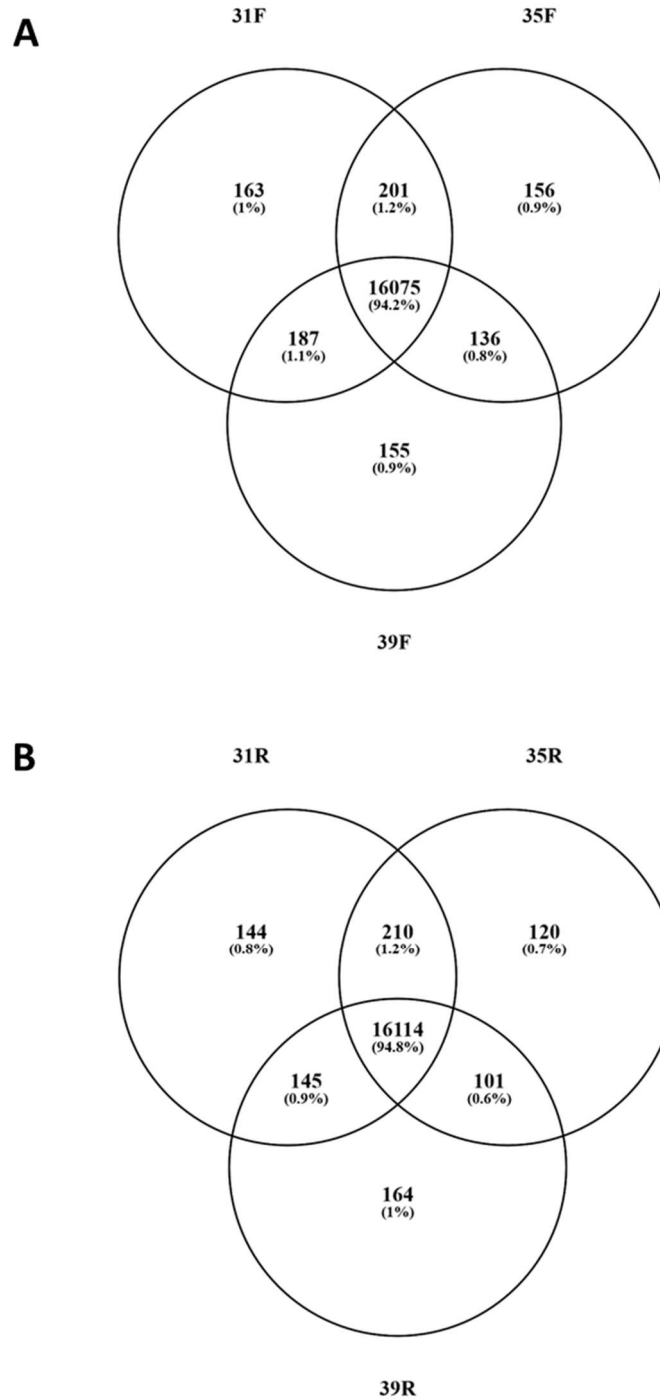


Figure 8. Expressed genes shared between lines at each brooding temperature. A. Poults brooded at 31°C. **B.** Poults brooded at 39°C. **C.** Poults brooded at 35°C. Genes were considered expressed if the average read count for the treatment group was > 4.0.

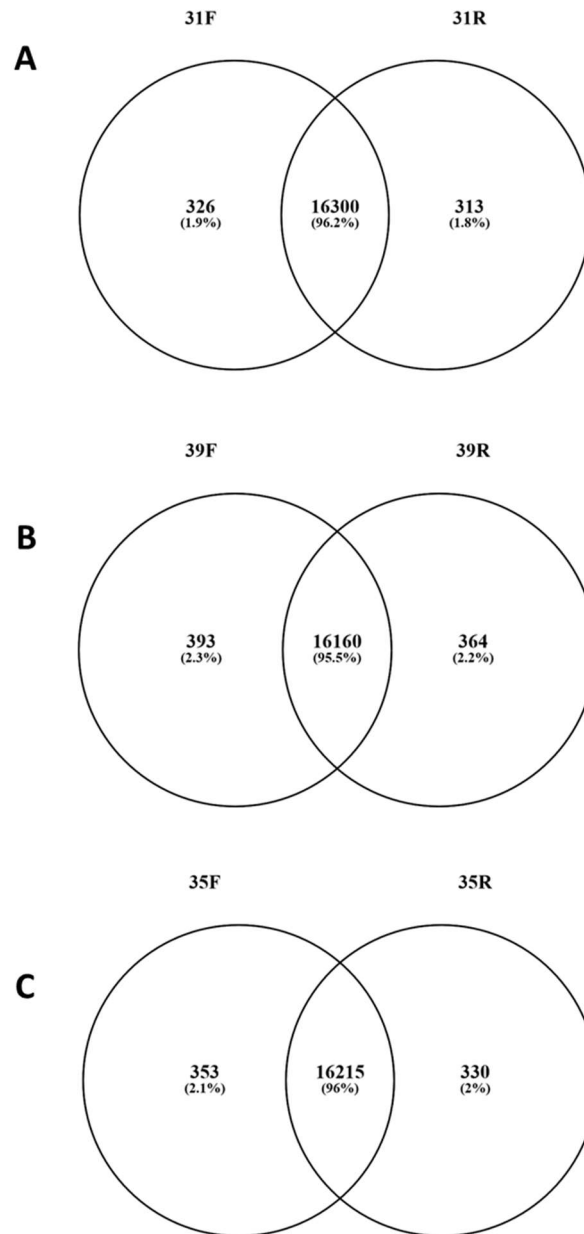


Figure 9. Few significant differentially expressed (DE) genes were shared between temperature comparisons. Shared DE genes were only observed in the fast growing F-line in comparisons between temperature treatments. HF = Heat-treated, fast-growing (F line) 47 DEGs, CF = cold-treated, fast-growing, 16 DEGs, HS = heat-treated slow-growing (RBC2), 3 DEGs, and CS = cold-treated slow-growing, 1 DEG.

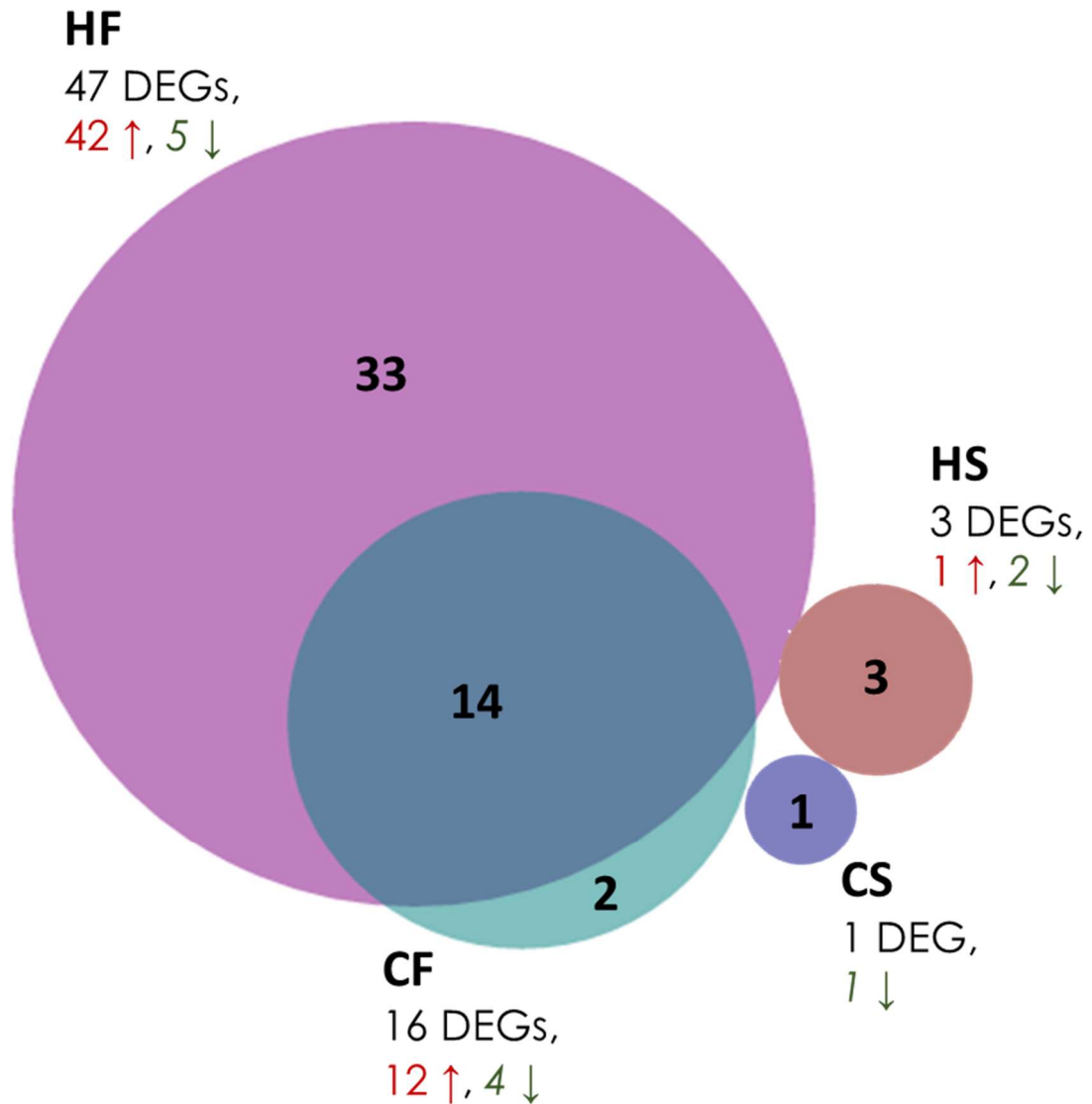


Figure 10. Predicted interaction network for the down regulated DEG *SAA1* (Serum Amyloid A1) obtained with IPA analysis ($\text{Log}_2\text{FC} = -6.55$, $p\text{-val} = 0.035$). Figure constructed using Ingenuity Pathway Analysis (IPA, Qiagen Bioinformatics).

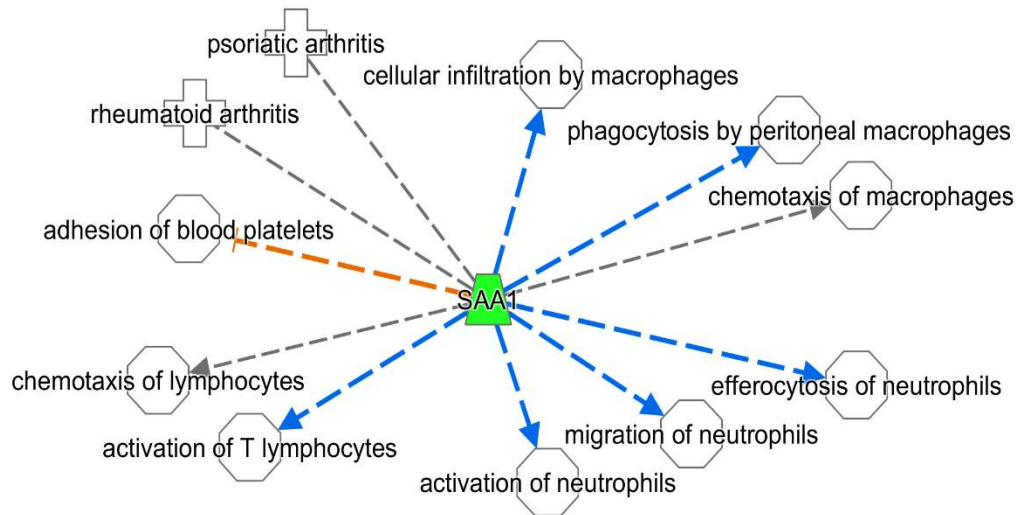


Figure 11. Canonical pathway determined by IPA shows altered gene expression in the Biotin-carboxyl carrier protein assembly for heat-treated slow-growing poults relative to their controls. Green denotes down-regulated genes. Figure constructed using Ingenuity Pathway Analysis (IPA, Qiagen Bioinformatics).

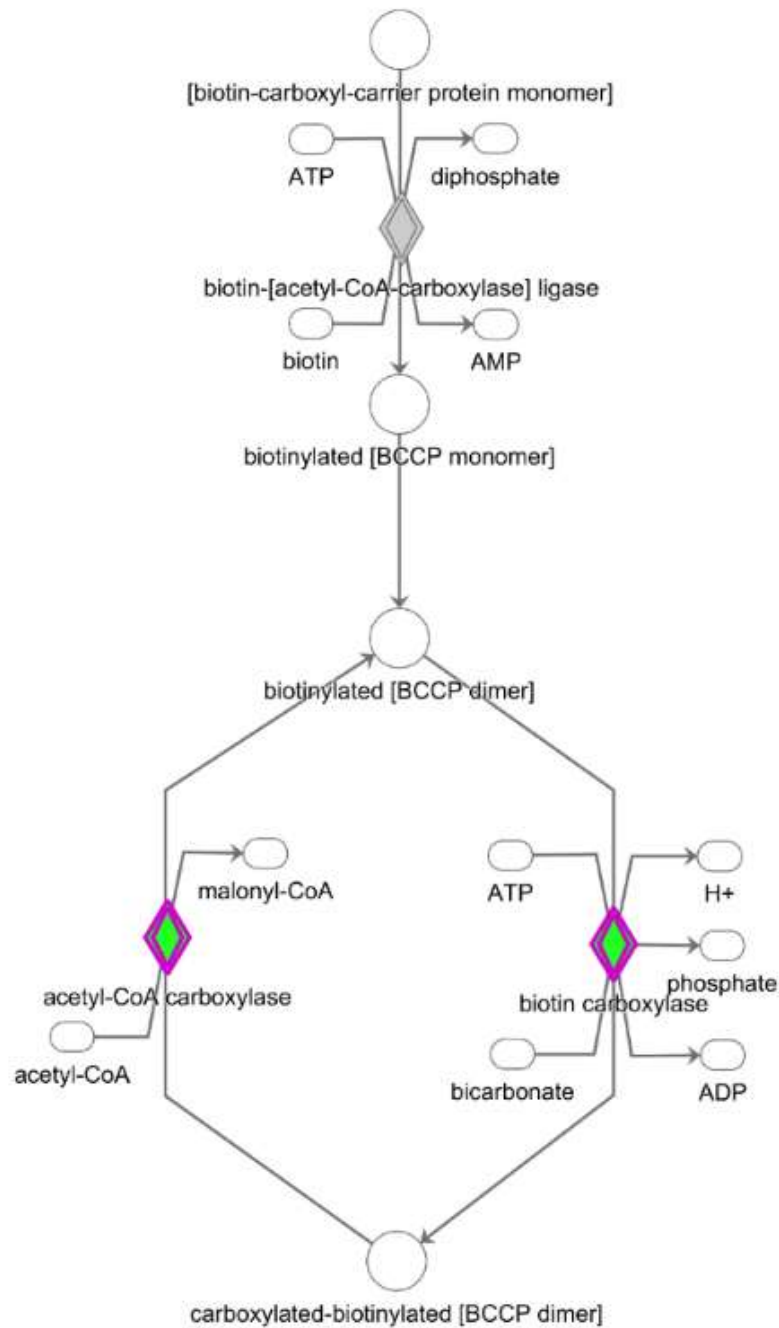


Figure 12. Disease and Small Molecule Biochemistry functions for heat-treated slow-growing turkey poult (RBC2) as determined by IPA. Genes colored green are down regulated, Red are up regulated, and predicted annotation changes are Orange (increased) and Blue (decreased). Yellow interactions are opposite from the predicted direction of change. Figure constructed using Ingenuity Pathway Analysis (IPA, Qiagen Bioinformatics).

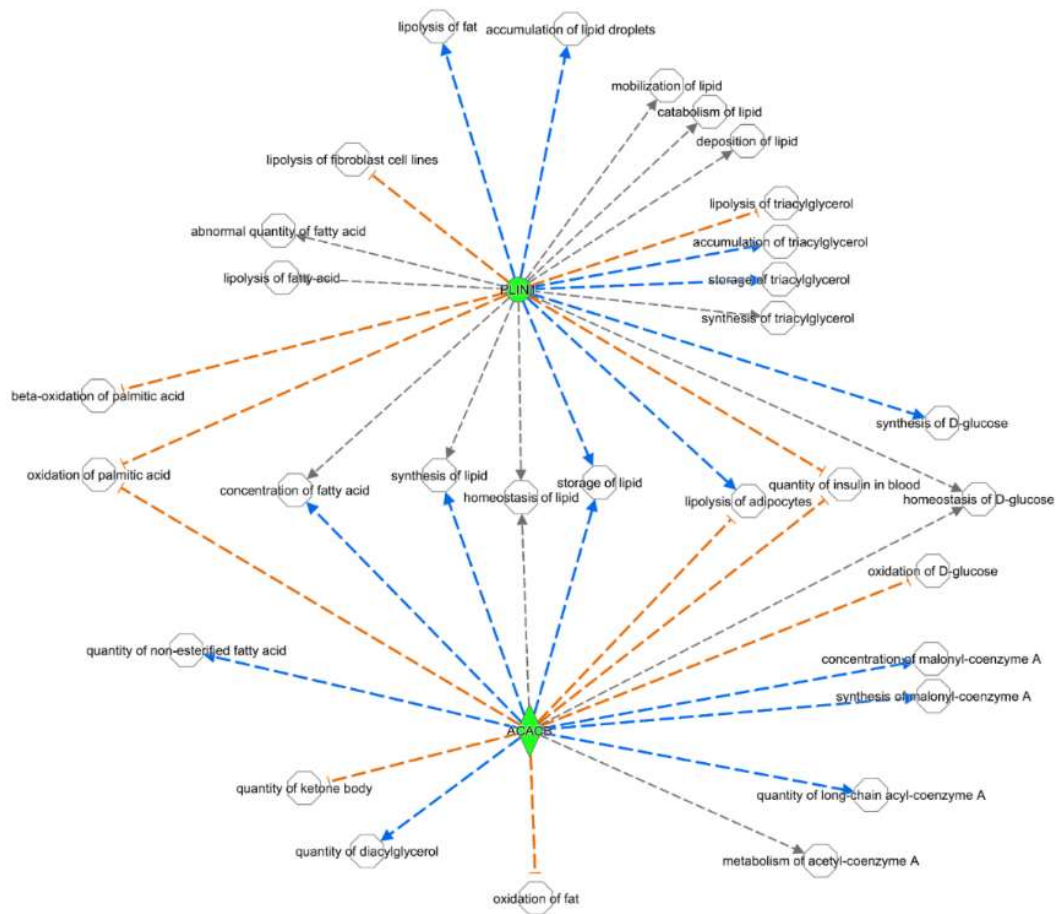


Figure 13. IPA Canonical Pathway for the IGF-1 Signaling Cascade for heat-treated (39°C) fast-growing (F-line) turkey poults. Genes in red are up regulated. Figure constructed using Ingenuity Pathway Analysis (IPA, Qiagen Bioinformatics).

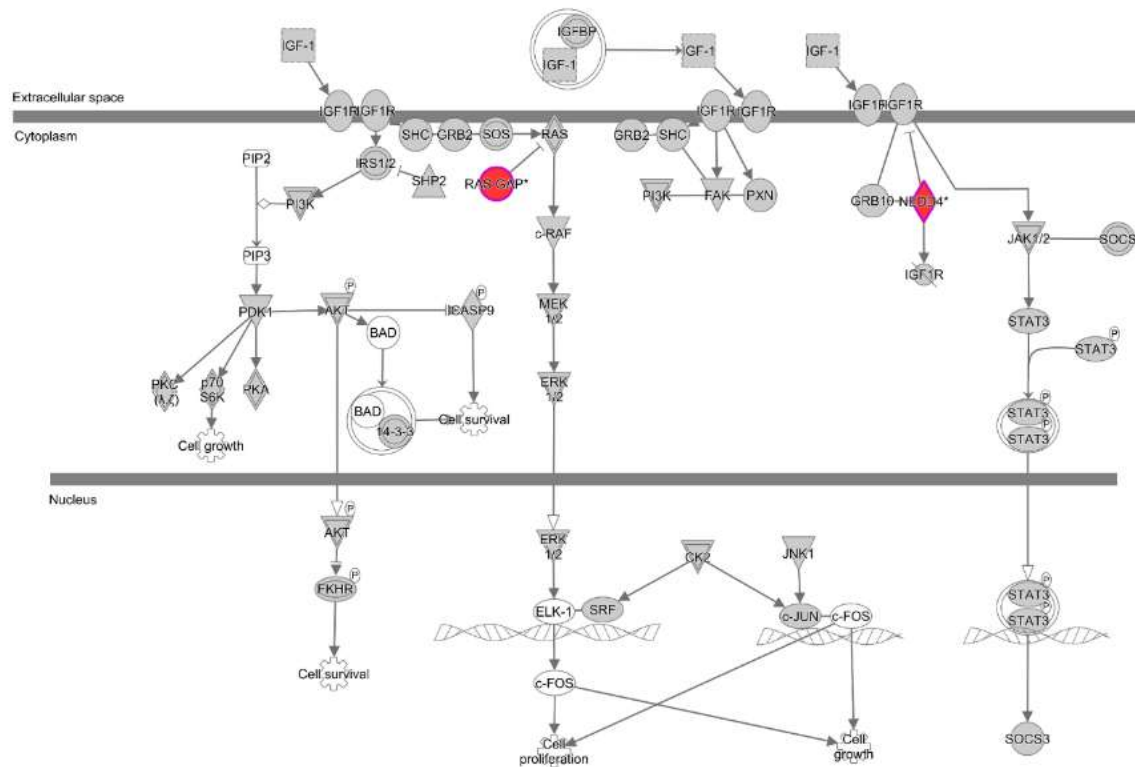


Figure 14. Gene network identified in IPA Disease and Functions for heat-treated (39°C) fast-growing poult (F-line). Genes in green are down regulated, Red are up regulated, and predicted annotation changes are Orange (increased) and Blue (decreased). Yellow interactions are opposite from the predicted direction of change. Figure constructed using Ingenuity Pathway Analysis (IPA, Qiagen Bioinformatics).

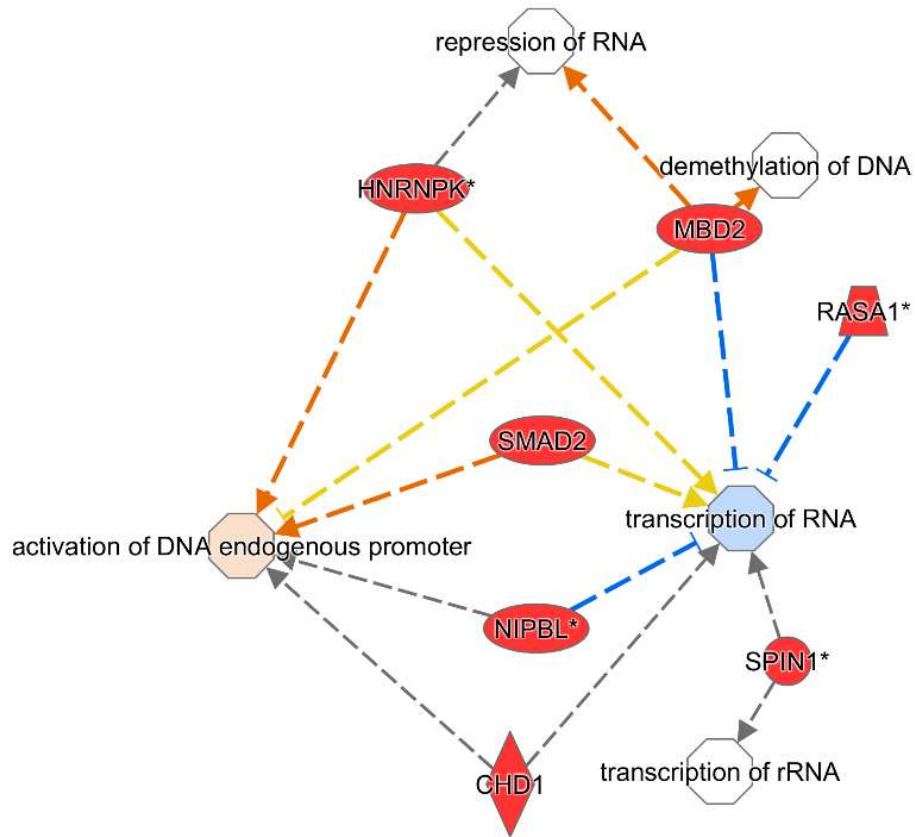


Figure 15. Distribution of significant differentially expressed (DE) genes in between-line comparisons. Few DE genes were shared, with most DE genes being unique to the between-temperature comparisons.

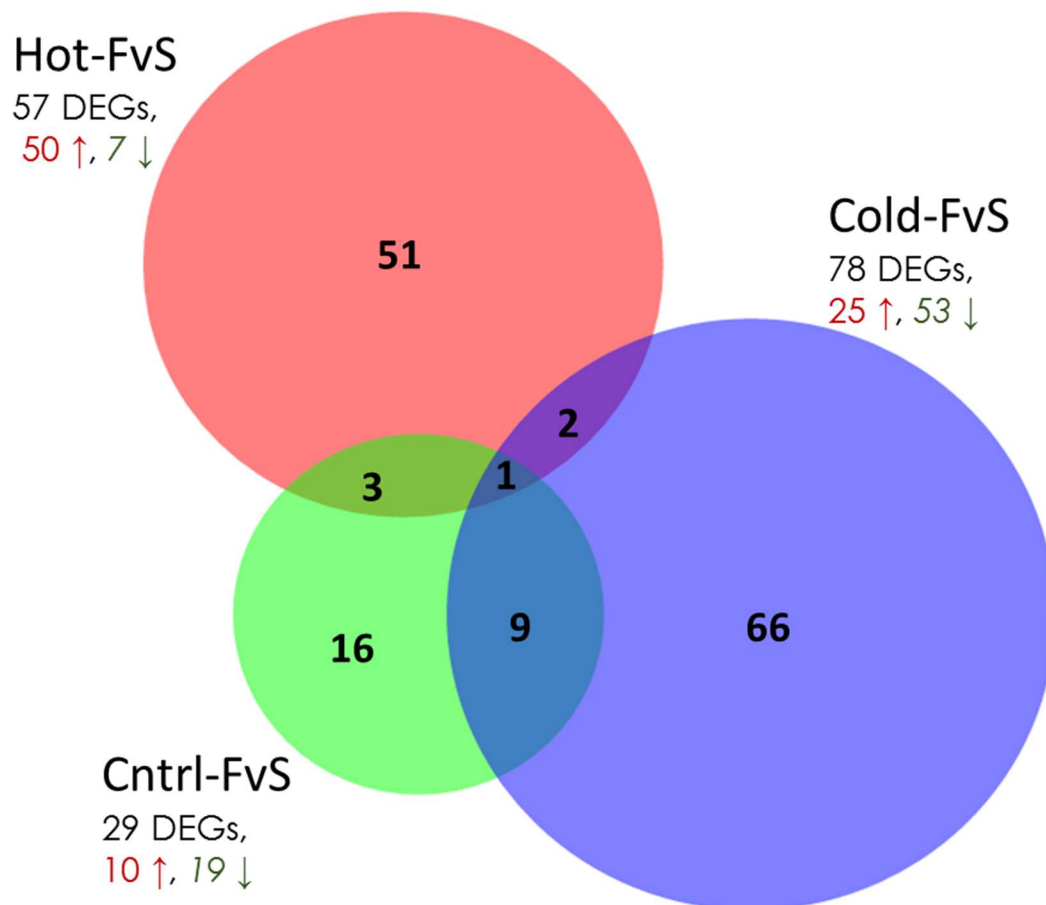
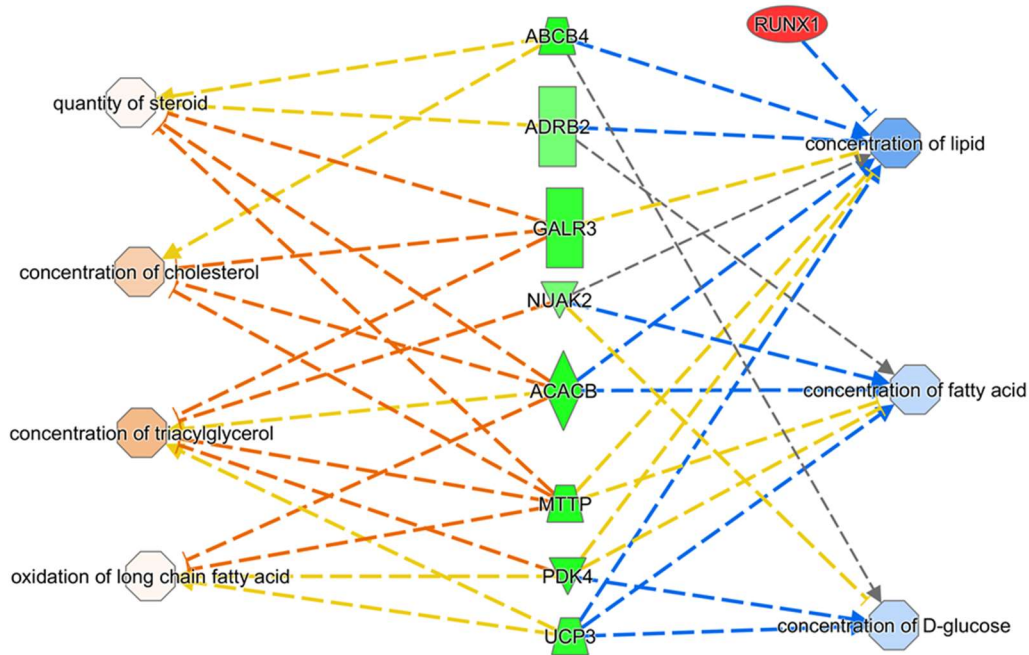


Figure 16. Gene network identified in IPA Disease and Functions, Small molecule biochemistry for between-line comparisons at the cold brooding temperature (31°C). Genes colored in green are down regulated in the fast-growing line (F-line) relative to the slow-growing line (RBC2), those in Red are up regulated, and predicted annotation changes are in Orange (increased) and Blue (decreased). Yellow interactions are opposite from the predicted direction of change. Figure constructed using Ingenuity Pathway Analysis (IPA, Qiagen Bioinformatics).



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Appendix 1. Average normalized read counts mapped to the turkey gene set (NCBI Annotation 101).

Feature ID	31F BTN Expression average	31R BTN Expression average	35F BTN expression average	35R BTN Expression average	39F BTN expression average	39R BTN expression average	Description
ACTA1	438340	664676	461758	614044	553956	542492	actin, alpha 1, skeletal muscle
GAPDH	178231	314664	251618	391528	370792	304290	growth associated protein 43
MYL1	196166	298792	214761	261923	247807	251566	myosin, light chain 1, alkali; skeletal, fast
TTN	166026	211826	162424	197340	191420	179600	titin
TNNT3	159911	202218	159524	174727	169358	175012	troponin T type 3 (skeletal, fast)
ACTN2	107120	162556	125168	169411	144089	151596	actinin, alpha 2
TNNI2	131709	172109	135315	138917	138921	139700	troponin I type 2 (skeletal, fast)
TNNC2	135346	180481	133594	140430	144742	139267	troponin C type 2 (fast)
ACTC1	131230	106014	121965	110951	156253	115323	actin, alpha, cardiac muscle 1
EEF1A1	93352	90539	101461	100008	81689	100362	embryonic ectoderm development
COL3A1	92344	77757	89977	87555	91694	78412	collagen, type II, alpha 1
LOC104913726	65052	75916	73468	82627	95912	77160	myosin-7-like
LOC100543020	49038	63450	59930	101335	68972	68198	coronin-7-like
HSP90AA1	79821	58577	72120	54551	71710	67075	heat shock transcription factor family member 5
COL1A2	70010	63910	86922	57136	55691	65246	collagen, type XIX, alpha 1
EEF1A2	42428	73742	54237	86887	63090	63495	eukaryotic translation elongation factor 1 alpha 1
CASQ2	50368	61429	48725	64584	71847	59887	caspase 9, apoptosis-related cysteine peptidase
TP11	36279	48432	47445	54903	68765	58081	triosephosphate isomerase 1
PPDPF							
	53531	65503	59048	57352	81765	57840	pancreatic progenitor cell differentiation and proliferation factor
LOC100547940	47967	60448	47819	69047	62289	57429	cadherin-10-like
RPSA	50464	56980	57086	58966	57071	57019	ribosomal protein SA
PGAM1	45215	49903	52944	57369	76012	56844	phosphoglycerate mutase 1 (brain)
VIM	45750	42132	45864	54660	45721	53208	vimentin
RPL5	44712	49486	49700	52064	46882	51345	ribosomal protein L5
UBB	41831	38404	48312	45766	41726	47184	ubiquitin B
PKM	26839	48298	37446	54223	70869	47087	pyruvate kinase, muscle
GATM	43721	40084	46360	37236	41489	47052	glutamyl-tRNA(Gln) amidotransferase, subunit B
ACTB	64440	39536	53387	35357	45677	45673	actin, beta
TPM1	42853	41077	45559	47674	51978	44704	tropomyosin 1 (alpha)
DES	49681	61506	50797	55136	45117	43267	derlin 2
PGK1	23401	33672	31056	41495	51844	42073	phosphoglycerate kinase 1
MYOZ1	37128	46512	39036	44788	45203	42067	myozenin 1
LOC100544580	43251	41173	51948	33066	32847	41773	arginine-glutamic acid dipeptide repeats protein-like
EEF2	36661	42494	41165	51965	38098	41043	eukaryotic translation elongation factor 1 epsilon 1
SPARC	42220	41014	42622	43927	44078	40490	secreted protein, acidic, cysteine-rich (osteonectin)
EIF4G2	44047	38002	41636	38875	42733	40271	eukaryotic translation initiation factor 4 gamma, 1
LOC100540000	49928	56011	39020	37503	31505	39572	dolichol-phosphate mannosyltransferase subunit 1
TPT1	36696	41466	35199	40824	35044	39276	tumor protein, translationally-controlled 1
LOC100549945	27670	41070	30444	40052	38551	38615	long-chain-fatty-acid--CoA ligase 3-like
RPS2	39422	38789	39981	36801	39392	38445	ribosomal protein S2
ATP5A1							
	31149	31899	35478	31736	28651	38296	ATP synthase, H+ transporting, mitochondrial F1 complex, alpha subunit
RPS6	28879	36726	37742	39675	26036	38261	1, cardiac muscle
HSPA8							
	53712	40558	36587	29138	52972	37913	heat shock 70kDa protein 5 (glucose-regulated protein, 78kDa)
LDHC	14664	25777	21438	32286	42224	35794	lactate dehydrogenase B
LOC100544198	29823	45813	18731	40392	29861	34879	uncharacterized LOC100544196
PFKM	22092	36559	27669	44604	40595	34508	phosphofructokinase, muscle
RPL4	30037	32745	33413	36463	30394	34100	ribosomal protein L4
FTH1	39576	32510	34386	31538	32819	33256	formimidoyltransferase cyclodeaminase
LOC100541641	18920	25258	27756	37534	23943	31917	potassium voltage-gated channel subfamily B member 1
LDB3	25714	30773	25692	28552	29193	31612	LIM domain binding 2
LOC100550282	11871	22473	17887	30817	34597	30356	L-lactate dehydrogenase A chain-like
RPL7A	26898	31260	29222	31225	26569	30353	ribosomal protein L7a
SRL	27203	31710	24123	28694	29106	30270	sarcalumenin
MYOM2	26104	33072	29380	35239	38120	30167	myomesin 2
YBX1	30169	27997	30470	28090	30487	29990	Y box binding protein 1
RPS8	28932	31652	31352	30788	29877	29945	ribosomal protein S8
RPL3	26493	31013	28696	34541	26025	29914	ribosomal protein L3
SLC25A4							
	17222	31456	20320	29284	28493	29377	solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 4
RPLP0	25578	26066	27629	27572	26894	28467	ribosomal protein, large, P0
COL4A1	27352	26927	26035	34426	30338	28312	collagen, type III, alpha 1
LOC104909939	24102	29172	25671	27806	33526	28240	M-protein, striated muscle-like
ATP5B							
	28917	28565	28900	28223	30672	27979	ATP synthase, H+ transporting, mitochondrial F1 complex, beta
	28917	28565	28900	28223	30672	27979	polypeptide
LOC100544583	34367	27259	31888	26539	26192	27729	collagen alpha-1(I) chain-like
EIF4A2	25322	26683	26675	33278	25667	27292	eukaryotic translation initiation factor 3, subunit M
RPL6	24253	26361	24803	28731	24336	27020	ribosomal protein L6
EEF1D	20990	27040	23846	29161	24181	26728	eukaryotic translation elongation factor 1 beta 2

GNB2L1							guanine nucleotide binding protein (G protein), beta polypeptide 1-like
LOC100542991	22788	27342	25195	29259	24962	26420	zinc finger protein Helios-like
RPL7	21681	27871	23229	28481	23148	26419	ribosomal protein L7
PGM1	23780	27442	26709	29005	23941	26037	phosphoglucomutase 1
GPI	15528	24555	18728	27212	31709	25552	gephyrin
MYOM1	18330	18142	22325	24918	27983	25392	myomesin 1
RPL9	16439	23472	19140	27209	22569	24924	ribosomal protein L9
EEF1B2	22354	25274	25201	26508	24224	24323	eukaryotic translation elongation factor 1 alpha 2
RPS3	24039	25614	26666	26467	25432	24182	ribosomal protein S3
VDAC2	20277	24287	23013	24712	22491	24115	voltage-dependent anion channel 2
RPL8	22913	23032	22911	23984	24762	23954	ribosomal protein L8
RPS15A	21015	24703	23074	25626	22917	22796	ribosomal protein S15a
ENO1	21351	23645	23195	24697	21207	22136	enkurin, TRPC channel interacting protein
ADSSL1	23338	20506	22792	22062	23651	22001	adenylosuccinate synthase like 1
COL6A2	12874	20975	14975	20812	20362	21886	collagen, type VI, alpha 1
MURC	23169	18898	23551	22185	20178	21688	muscle-related coiled-coil protein
HDLBP	11140	20849	14887	21702	18008	21574	haloacid dehalogenase-like hydrolase domain containing 3
RPS24	24086	20842	22604	21105	22010	21476	ribosomal protein S24
RPS12	18885	21542	21230	22762	19642	21342	ribosomal protein S12
RPS7	19991	21566	21470	20227	19423	21265	ribosomal protein S7
LOC100549134	19347	21768	22916	22212	21247	20582	cytochrome P450 2J2-like
RPLP1	12135	23389	13579	19157	19178	20413	ribosomal protein, large, P1
COL6A1	15325	21901	18184	20936	17006	19629	collagen, type V, alpha 2
CMYA5	21160	17953	22475	20049	20621	19629	cap methyltransferase 2
NPM1	10526	18612	13070	21581	14393	19303	nucleophosmin (nucleolar phosphoprotein B23, numatrin)
LMNB2	21366	15790	20718	17398	16943	19203	leishmanolysin-like (metallopeptidase M8 family)
LOC104914081	22377	15927	21689	15890	16551	19111	regulator of G-protein signaling 9-binding protein-like
RPL13	21162	27985	19030	21374	23116	19070	ribosomal protein L13
SLC25A3	17343	19990	18462	21053	17211	18759	solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 3
AK1	16002	16427	16697	15749	17122	18694	adenylate kinase 1
RPL19	12731	18002	15328	19842	21277	18683	ribosomal protein L19
SYNPO2L	18819	19209	18862	17980	18110	18664	synaptopodin 2-like
PABPC1	18803	28756	18750	24871	14682	18275	poly(A) binding protein, cytoplasmic 1
AHCY	20354	17299	19767	19214	16071	18248	adenosylhomocysteinase
GPD1	14064	14782	15507	19039	13759	18017	
SERPINH1	10099	18280	11814	19045	23047	17777	glycerophosphocholine phosphodiesterase GDE1 homolog (S. cerevisiae)
RPS10	24037	15460	22077	14234	18937	17669	serpin peptidase inhibitor, clade H (heat shock protein 47), member 1, (collagen binding protein 1)
PRR33	16026	20886	17244	19781	17222	17646	ribosomal protein S10
RPL37	17206	19753	15842	21149	21666	17557	proline rich 33
MYBPH	15635	21539	17138	20843	14437	17485	ribosomal protein L37
CALM2	14051	14556	14146	16118	18922	17470	myosin binding protein H
DDX3X	17124	16236	17280	15457	15055	17329	calmodulin 1 (phosphorylase kinase, delta)
ZNF106	18697	16943	17659	18594	20301	17281	DEAD (Asp-Glu-Ala-Asp) box polypeptide 31
LOC100539974	14807	14441	15567	17222	14552	17109	zinc finger protein 106
RPS23	22948	13824	19159	11492	14470	17025	coiled-coil domain-containing protein 132-like
RPL21	13385	15212	16671	15569	11814	16988	ribosomal protein S23
LOC104912763	15287	17003	17048	18616	14812	16476	ribosomal protein L21
RPL11	21560	19631	18770	17568	16104	16445	uncharacterized LOC104912763
CSDE1	14885	18199	16426	18679	15729	16431	ribosomal protein L11
RPL37A	18753	15301	17706	15547	16068	16398	cold shock domain containing C2, RNA binding
LOC100542866	16190	21452	16852	19475	17109	16396	ribosomal protein L37a
RPL32	4618	12646	4479	18852	6648	16055	transcription factor AP-4-like
RPL10A	15118	18274	16605	18960	15525	16007	ribosomal protein L32
RPL23	13071	16330	15236	17333	13978	15782	ribosomal protein L10a
IDH3A	14621	19540	15239	17312	15243	15733	ribosomal protein L23
CARKD	12364	11875	13581	13917	14797	15630	isocitrate dehydrogenase 2 (NADP+), mitochondrial
DCN	12049	13365	13766	16168	17281	15582	calcium regulated heat stable protein 1, 24kDa
RPL26L1	16268	16649	19497	16673	14565	15533	DNA cross-link repair 1C
LOC104916999	13905	16356	15215	16237	13998	15515	ribosomal protein L26-like 1
CIRBP	10094	15776	15166	18858	26949	15464	beta-enolase-like
RBM24	15519	16842	15917	13546	14490	15405	CLOCK-interacting pacemaker
CNBP	12695	14440	14001	15978	13844	15362	RNA binding motif protein 24
RPS16	15721	13814	15104	13188	15260	15337	cardiomyopathy associated 5
PTPLA	14539	15805	16002	16546	14929	15310	ribosomal protein S16
PDLIM5	13569	11984	14921	13847	16568	15258	protein tyrosine phosphatase-like (proline instead of catalytic arginine), member A
RPL27	16222	20053	16206	20711	24952	15252	PDZ and LIM domain 5
OGT	13884	17023	14743	16448	14270	15197	ribosomal protein L27
HSPB1	14733	14360	12984	14912	14603	14978	O-linked N-acetylglucosamine (GlcNAc) transferase
RYR3	21832	21767	18305	16897	20783	14899	heat shock 70kDa protein 9 (mortalin)
COL6A3	11889	13684	13109	17342	14441	14891	ryanodine receptor 3
RPL27A	16946	12330	16956	14549	15317	14742	collagen, type VI, alpha 2
RHOA	13146	15306	15083	16100	13002	14650	ribosomal protein L27a
TMEM182	16359	13694	15825	12446	13289	14588	ras homolog family member A
HNRNPA2B1	12768	17959	12919	13690	12944	14585	transmembrane protein 182
	14708	14397	14301	13001	12842	14529	heterogeneous nuclear ribonucleoprotein A0

LOC100543743	10922	12673	15366	13563	10423	14529	olfactory receptor 452-like
RPL23A	14560	16627	15214	17070	14110	14497	ribosomal protein L23a
LOC104913324	9002	11033	10230	10528	10398	14443	uncharacterized LOC104913324
MDH1	11067	12113	11486	11919	13096	14379	malate dehydrogenase 1, NAD (soluble)
RPL14	13025	15398	14520	15646	13329	14341	ribosomal protein L14
DDX5	14363	13307	13971	13200	13333	14098	DEAD (Asp-Glu-Ala-Asp) box polypeptide 49
NCL	16347	12368	15481	12913	11970	13892	nucleolin
RPS3A	12277	15267	12726	14709	11966	13637	ribosomal protein S3A
LOC100542210	12471	13987	12562	13222	14083	13600	motile sperm domain-containing protein 2
RPL15	12711	14468	13863	14509	12808	13536	ribosomal protein L15
RPS20	12125	14608	13361	14800	12243	13401	ribosomal protein S20
LOC104913399	14064	11989	14028	12548	13594	13315	uncharacterized LOC104913399
SLC25A6							solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 6
PTP4A1	14043	12190	13864	12190	10752	13296	protein tyrosine phosphatase type IVA, member 1
YWHAE	8893	13140	9145	14076	12238	13276	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, epsilon
	14824	11743	13919	12086	13306	13247	malate dehydrogenase 2, NAD (mitochondrial)
MDH2	11997	12901	12595	11694	12683	13231	fragile histidine triad
FHL1	27568	21978	18279	13749	15489	13219	melanoma cell adhesion molecule
MCAM	15236	12175	14399	12556	14519	13218	nidogen 1
NID1	12195	12342	12451	15625	13029	13208	ribosomal protein L39
RPL39	13018	14750	13260	13446	12594	13125	activating transcription factor 4
ATF4	14284	13422	14964	12172	13814	13062	protein phosphatase 1, catalytic subunit, beta isoform
PPP1CB	14772	12256	14523	12091	12422	13054	coiled-coil-helix-coiled-coil-helix domain containing 1
CHCHD2	12711	13988	13151	11799	15513	12991	calpain 2, (m/II) large subunit
CAPN3	12945	11101	12888	13224	13065	12922	transmembrane protein 38A
TMEM38A	12102	11473	12365	12520	16051	12809	tubulin beta-2 chain
LOC104910121	15856	8136	13363	7492	10392	12726	ribosomal protein L10
RPL10	10638	11097	11580	11748	11002	12591	collagen, type V, alpha 1
COL5A2	12774	12307	14152	12337	12254	12591	ribosomal protein L18a
RPL18A	11350	13259	12482	13944	11371	12590	amyloid beta (A4) precursor-like protein 2
APLP2	15058	13597	12753	10969	11408	12308	ribosomal protein S14
RPS14	10857	13235	11950	13152	11699	12182	apolipoprotein A-I
APOA1	9921	15503	8953	10923	8011	12142	radixin
RDX	13638	11608	12813	11270	12217	12040	N(alpha)-acetyltransferase 50, NatE catalytic subunit
NAA50	11336	10648	11147	10357	11655	12002	parvalbumin beta-like
LOC100543639	10465	11165	9263	11109	12795	11973	stathmin 1
STMN1	12035	11371	12422	10839	9253	11948	complement factor I
CFL2	14406	12421	13076	12004	12339	11937	ribosomal protein S25
RPS25	10970	13722	12079	13892	11928	11933	
HSPD1							
	16202	10120	14275	9262	11782	11827	HSPA (heat shock 70kDa) binding protein, cytoplasmic cochaperone 1
LOC104913729	2827	11328	2339	10333	5436	11818	myosin heavy chain, skeletal muscle-like
IDH2	10428	12597	10569	12881	12375	11816	isocitrate dehydrogenase 1 (NADP+), soluble
FBXL22	13824	11252	12511	12444	14775	11760	F-box and leucine-rich repeat protein 21
LOC100543005	8709	13595	11279	13816	8690	11684	DNA-binding protein SATB1-like
ANXA6	12885	11421	11764	11316	10774	11653	annexin A6
OAZ1	10911	10691	11460	9435	10378	11590	ornithine decarboxylase antizyme 1
RPLP2	11396	11897	11990	12116	11073	11533	ribosomal protein, large, P2
DSTN	16070	10476	14254	9476	11540	11516	desmoplakin
ATP5C1							ATP synthase, H+ transporting, mitochondrial F1 complex, gamma
	10492	12112	10960	10941	10743	11489	polypeptide 1
LOC100539006	24539	6995	14390	16883	26375	11421	zinc finger CCHC domain-containing protein 14
COL4A2	12197	11486	11796	15241	13737	11415	collagen, type IV, alpha 1
NME2	9738	11247	10633	11329	10402	11301	NME/NM23 nucleoside diphosphate kinase 2
RPL30	11026	10658	11800	11237	10500	11280	ribosomal protein L30
ANK1	8438	9880	8392	10760	12435	11230	ankyrin 1, erythrocytic
LUM	11653	10034	12725	11277	10556	11195	lumican
HSP90B1							
	14419	9216	12579	10810	10480	11138	heat shock protein 90kDa alpha (cytosolic), class B member 1
LOC104912834	11603	10305	11348	11573	10787	11056	nicotinamide riboside kinase 2-like
DYNC1H1	11950	9720	11672	11719	11053	11036	DPY30 domain containing 1
LOC104911821	9240	11133	9357	10568	11200	11014	uncharacterized LOC104911821
SESN3	8016	6982	8045	10264	11823	10994	sestrin 3
LOC100551296	8594	11006	9252	12107	11263	10972	cystatin
LOC104912276	6005	9945	7830	11438	11498	10943	glycogen debranching enzyme-like
LOC104914203							basement membrane-specific heparan sulfate proteoglycan core protein-like
	14351	12753	12948	11717	12779	10908	troponin T type 2 (cardiac)
TNNT2	14048	9668	11035	9931	10278	10869	thymosin beta 15B
TMSB15B	12464	13271	11978	12178	11603	10868	SERPINE1 mRNA binding protein 1
SERBP1	12084	10191	11471	10396	11156	10850	
OBSCN							
	10842	13049	9491	14446	12182	10845	obscurin, cytoskeletal calmodulin and titin-interacting RhoGEF
HSPA9	12706	9876	11803	8819	10110	10831	heat shock 70kDa protein 8
LOC104915388	9924	9281	10676	9919	9927	10739	40S ribosomal protein S3a pseudogene
RPS15	9225	11641	10246	11686	10076	10706	ribosomal protein S15
HNRNPH1	12014	9970	11134	9454	10344	10632	heterogeneous nuclear ribonucleoprotein D-like
RPS11	9502	11550	10198	10856	9694	10597	ribosomal protein S11
EIF4EBP1	8170	10117	8825	9291	9362	10583	eukaryotic translation initiation factor 4E family member 3

CCNI	9801	11527	9613	12363	12479	10552	cyclin H
XIRP1	12485	13505	11094	12443	8856	10506	xin actin-binding repeat containing 1
LOC104912381	6916	12607	7642	11762	9796	10503	myomegalin-like
SDHA	8801	11014	9396	11169	9397	10476	succinate dehydrogenase complex, subunit A, flavoprotein (Fp)
HNRNPA3	10864	10707	10428	9548	9529	10442	heterogeneous nuclear ribonucleoprotein A2/B1
CAPRIN1	10071	8894	9657	10292	9787	10362	calpain, small subunit 2
COL5A1	12012	10432	12546	10582	9667	10351	collagen, type IV, alpha 6
ASPH	11040	10496	11426	10728	11123	10292	aspartate beta-hydroxylase
PDLIM3	8401	15669	9754	19363	5805	10189	PDZ and LIM domain 3
RPL12	9937	10925	10404	10926	10624	10152	ribosomal protein L12
ATP5F1	9364	10368	9416	9048	9570	10081	ATP synthase, H+ transporting, mitochondrial Fo complex, subunit B1
RPL35A	9589	9446	10515	9521	10275	10038	ribosomal protein L35a
FSTL1	12367	11509	11485	10988	12716	9987	folliculin
LOC104909644	11666	9173	11517	11291	10055	9934	spectrin beta chain, non-erythrocytic 5-like
MYOZ2	10769	11606	10143	9940	8703	9918	myozenin 2
RPS27A	8804	9570	9231	9747	8535	9852	ribosomal protein S27a
DNAJA1	8652	7941	7957	7567	9342	9819	dynein, axonemal, intermediate chain 2
LOC100545341	13762	13752	11764	16929	14410	9779	uncharacterized LOC100545338
ALPK3	10801	12214	10809	12187	11257	9763	alpha-kinase 3
FXR1	7979	9124	8443	9893	9929	9762	frataxin
ACO2	8591	9627	8376	9270	9155	9761	aconitase 2, mitochondrial
AMPD1	4764	7077	6218	10116	13353	9760	adenosine monophosphate deaminase 1
SLN	9474	13647	9300	10511	11236	9758	sarcolipin
ATP5G1	7955	9018	8387	7612	9165	9755	ATP synthase, H+ transporting, mitochondrial Fo complex, subunit C1 (subunit 9)
ITGB1	10600	8914	10374	9237	9340	9631	integrin, alpha V
LOC104912139	9450	9780	9672	9394	8975	9505	60S ribosomal protein L36a
HMG2	10861	9426	10251	7674	7743	9498	high mobility group nucleosome binding domain 1
RPL24	9105	9365	9487	9919	8863	9488	ribosomal protein L24
FKBP1A	9277	9032	9078	9495	10195	9471	FK506 binding protein 15, 133kDa
NID2	11981	9156	10723	10236	10337	9462	nidogen 2 (osteonidogen)
YBX3	8132	11029	8034	10666	8941	9443	Y box binding protein 3
NES	9720	5403	7142	4613	7214	9427	nestin
LOC104909938	7509	9309	8753	11410	11365	9422	M-protein, striated muscle-like
SH3BGR	7001	9032	7557	8705	8696	9371	SH3 domain binding glutamate-rich protein
MAT1A	6024	7438	7424	7761	7417	9365	methionine adenosyltransferase I, alpha
CALR	11258	8073	9602	8501	8313	9244	calneuron 1
SGCD	6511	9462	6600	9395	6126	9234	sarcoglycan, delta (35kDa dystrophin-associated glycoprotein)
RPS17	8726	10595	9579	9928	9324	9192	ribosomal protein S17
ACAA2	8594	9126	9372	7692	7336	9179	acetyl-CoA acyltransferase 2
UNC45B	8566	8799	8178	9531	9929	9136	unc-45 homolog B (C. elegans)
LOC100549893	8473	9434	8166	8312	8465	9122	shootin-1-like
RPS27	8077	9154	8941	8635	9016	9098	ribosomal protein S27
LOC100538694	7912	10402	8254	9331	8329	9060	protein C19orf12 homolog pseudogene
TMOD1	4139	6752	5136	8039	5014	8965	tropomodulin 1
G3BP1	8353	6817	8057	7250	8835	8960	G2/M-phase specific E3 ubiquitin protein ligase
DDB1	8847	8930	8951	8972	8678	8947	dimethylarginine dimethylaminohydrolase 1
LOC100545074	9234	9397	8932	9093	9741	8927	disintegrin and metalloproteinase domain-containing protein 10-like
LOC100543330	11688	19094	6135	7656	6770	8925	phospholipase A2, minor isoenzyme-like
RPL35	8138	9125	9011	8882	8056	8903	ribosomal protein L35
OGN	9029	7427	9842	8320	7054	8816	osteoglycin
KLHL24	5470	8502	6622	10977	7004	8815	kelch-like family member 23
CDC42	9318	7840	8773	7549	8529	8784	cell division cycle 40
LOC723983	8417	8984	7692	7087	9233	8701	cytochrome c oxidase subunit VIa
LOC104910981	10133	8427	9581	8251	8057	8662	importin-7-like
PLS3	9790	6641	10648	7660	7765	8643	plastin 3
PHKA1	5854	7528	6723	8537	10426	8642	phosphorylase kinase, alpha 1 (muscle)
RAN	10452	7834	10144	7547	8302	8629	RAN, member RAS oncogene family
CCT6A	10201	7031	9038	6548	8210	8564	chaperonin containing TCP1, subunit 5 (epsilon)
NRAP	7243	12553	8698	14209	6338	8552	nebulin-related anchoring protein
SACS	7916	5767	8160	8948	10293	8541	sacs molecular chaperone
ASUN	9214	7620	9014	8924	9273	8535	asunder spermatogenesis regulator
SUCLG1	5932	7346	7144	7473	7626	8529	succinate-CoA ligase, alpha subunit
LOC104917564	10492	7638	11698	6242	7369	8510	uncharacterized LOC104917564
PPIA	10916	7937	9731	7313	8240	8461	peptidylprolyl isomerase A (cyclophilin A)
HSPA5	10678	7974	8636	6213	8121	8451	heat shock 70kDa protein 4-like
CYC	7981	7693	7935	7387	8489	8447	CXXC finger protein 5
RPL31	7879	10287	8525	10272	8414	8408	ribosomal protein L31
H3F3B	9363	8351	9470	7640	7921	8405	H3 histone, family 3A
RPS13	8157	9422	8247	8968	7747	8397	ribosomal protein S13
ITM2A	8505	8913	8527	8042	8246	8382	IL2-inducible T-cell kinase
HSP90AB1	7991	6229	7891	6353	7401	8359	heat shock protein 90kDa alpha (cytosolic), class A member 1
PACSL1	9191	9491	9059	7449	8572	8347	protein kinase C and casein kinase substrate in neurons 3
CCT8	11144	6874	10921	7131	8678	8333	chaperonin containing TCP1, subunit 7 (eta)

GOT2	7693	7824	7588	7583	8537	8327	glutamic-oxaloacetic transaminase 1, soluble
TUBB4B	11932	7299	10363	8194	8382	8320	tubulin, beta 4B class IVb
MGP	7137	15395	7061	12040	8252	8287	matrix Gla protein
LOC100542032	7674	8850	7414	8028	8033	8268	roquin-1-like
ADAMTS20							
	5443	6687	5736	7590	11184	8233	ADAM metalloproteinase with thrombospondin type 1 motif, 20
LOC100544043	12606	5072	17058	7255	10703	8175	PGAP2-interacting protein-like
SRSF1	9826	7166	8956	6604	7596	8173	serine/arginine-rich splicing factor 1
FXVD6	6549	10370	6737	8781	7865	8155	FXVD domain containing ion transport regulator 2
AKAP12	8604	7106	8731	8867	7598	8130	A kinase (PRKA) anchor protein 12
LOC100538539	7536	7576	7411	7140	7945	8119	creatine kinase U-type, mitochondrial
EIF3E	7492	8699	8584	9676	7262	8109	eukaryotic translation initiation factor 3, subunit D
MYPN	8013	9059	8837	9119	8208	8071	myopalladin
GBAS	6193	8234	6494	8424	7288	8019	glucosidase, beta (bile acid) 2
ATP5G3							ATP synthase, H+ transporting, mitochondrial Fo complex, subunit C3 (subunit 9)
	8458	7001	8166	6464	8065	8019	
GPX3	6759	10916	7627	9304	10108	8010	glutathione peroxidase 2 (gastrointestinal)
SPTAN1	7312	7382	7321	8269	7771	7961	spectrin, alpha, non-erythrocytic 1
SIM2	7023	5612	7112	7299	7941	7829	single-minded family bHLH transcription factor 2
RAB1A	8239	7092	7966	6899	7348	7815	RAB1A, member RAS oncogene family
LOC104913742	5775	8499	5532	7046	5279	7802	myosin-6-like
CCT2	9360	6651	9043	6932	7483	7792	coiled-coil serine-rich protein 1
HNRNPH3	8798	6988	7906	6313	6980	7777	heterogeneous nuclear ribonucleoprotein H1 (H)
CACNA1S	6501	8409	6744	9917	7072	7773	calcium channel, voltage-dependent, T type, alpha 1I subunit
KPNA4	9219	8926	8634	8463	8257	7755	karyopherin alpha 3 (importin alpha 4)
TMPO	7526	7059	7406	7072	7009	7726	thymopoietin
LOC104912484	7685	9253	8274	8320	7423	7725	nexilin-like
GHITM	6267	7053	6082	6660	6167	7722	GH3 domain containing
LIMCH1	6509	7023	6722	7004	6664	7718	LIM domain and actin binding 1
DMD	5744	7512	6282	9225	7747	7680	DNA meiotic recombinase 1
LOC100549990	5293	6898	5608	8124	7886	7671	alpha N-terminal protein methyltransferase 1B-like
CAV3	8038	8985	7823	8080	7409	7660	caveolin 2
LAMC1	7968	8036	7594	9313	8006	7617	laminin, beta 3
SSR1	8677	6946	8187	6298	7188	7600	signal sequence receptor, alpha
LOC100546929	4739	5830	6339	7672	5753	7566	small nuclear RNA activating complex polypeptide 4
LAMB1	8148	7601	7875	9045	8245	7541	laminin, alpha 5
PHB2	7659	6910	7336	6819	7290	7530	prohibitin 2
MLF1	6537	9683	7232	7043	10455	7512	myeloid leukemia factor 1
PDIA3	9322	6973	8236	6737	6933	7454	protein disulfide isomerase family A, member 3
CAPN11	8975	7406	8209	7634	7081	7454	calpain 10
MATR3	8477	6799	8054	7495	7174	7429	matrin 3
APOBEC2							
	3624	7514	4962	7756	6631	7427	apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 2
LRRRC6	6312	6696	6734	7170	7801	7416	leucine rich repeat containing 66
C1QBP	7881	6880	7594	6440	6912	7394	complement component 1, q subcomponent, B chain
TNNC1	5203	6496	6266	8662	14132	7388	troponin C type 1 (slow)
NDUFA4	6935	9290	7310	7751	7678	7388	NDUFA4, mitochondrial complex associated
CTNNB1	8674	6692	8382	6201	6922	7279	catenin (cadherin-associated protein), alpha-like 1
RPL29	7371	8285	7824	8897	7458	7246	ribosomal protein L29
SF3B1	6658	7051	6759	7369	6854	7237	splicing factor 3b, subunit 1, 155kDa
LOC104911464	8831	6254	10694	8586	6697	7235	collagen alpha-2(I) chain-like
CACNG1	5385	6426	6259	7365	6973	7189	calcium channel, voltage-dependent, beta 4 subunit
CCT5	8777	6198	8222	6211	6835	7186	chaperonin containing TCP1, subunit 4 (delta)
INSIG1	6296	2980	6502	4080	7260	7163	inscuteable homolog (Drosophila)
EIF3F	6021	7093	6360	7753	6573	7160	eukaryotic translation initiation factor 3, subunit E
RPL36	6928	9000	7274	8290	6909	7138	ribosomal protein L36
APP	6999	6713	7041	6920	6734	7128	amyloid beta (A4) precursor protein
LOC104909291	9529	3881	13307	7184	8304	7114	myosin heavy chain, skeletal muscle, adult-like
LOC104909805	6550	6596	6525	7596	8850	7104	triadin-like
LOC100548331	8013	6440	7872	6030	6460	7103	cytochrome c oxidase subunit 7A2, mitochondrial
PTRF	6796	8193	6905	8039	6974	7100	polymerase I and transcript release factor
TMED5							
	7455	6460	7241	6159	7126	7068	transmembrane emp24 protein transport domain containing 5
UBA52	7122	8778	6765	8368	6565	7044	ubiquitin A-52 residue ribosomal protein fusion product 1
PTGES3	9104	6154	8071	5880	6750	7031	prostaglandin H synthase 3 (cytosolic)
TNNI1	7384	6756	5413	6106	5436	7028	troponin I type 1 (skeletal, slow)
NMRK2	4799	6318	4731	5186	9162	7002	nicotinamide riboside kinase 2
C8H10orf71	6708	5861	6302	9227	7596	7001	chromosome 8 open reading frame, human C10orf54
COL15A1	6407	7410	6398	7937	5981	6956	collagen, type XIV, alpha 1
CAP2	4173	7108	4603	6984	5474	6907	CAP, adenylate cyclase-associated protein 1 (yeast)
SOD2	5343	6011	5739	6254	6625	6877	superoxide dismutase 2, mitochondrial
LOC100544620	7060	6249	6760	6045	6015	6857	nodal modulator 1
SGCG							
	5124	7152	6114	7669	6773	6856	sarcoglycan, gamma (35kDa dystrophin-associated glycoprotein)
PENK	5946	5720	7053	6053	6269	6824	proenkephalin
MYO18B	6265	8441	6451	8611	7570	6785	myosin XVIIIIB
PPP1CA	6691	6848	6821	6805	7020	6748	protein phosphatase 1, catalytic subunit, alpha isozyme
NDUFS1							NADH dehydrogenase (ubiquinone) Fe-S protein 1, 75kDa (NADH-coenzyme Q reductase)
	7006	6379	6759	6283	6833	6748	

EIF3I	5564	6956	5955	7112	5431	6743	eukaryotic translation initiation factor 3, subunit H
ATP2A2	5145	4524	5274	5208	4286	6693	ATPase, Ca++ transporting, cardiac muscle, slow twitch 2
LOC104912610	7849	6393	7251	6507	6967	6637	uncharacterized LOC104912610
CTSD	7492	6233	6908	6288	9389	6542	cathepsin C
TCP1	8325	5767	7463	5355	6305	6526	t-complex 1
BZW1	5940	5593	5877	5650	5440	6510	benzodiazepine receptor (peripheral) associated protein 1
ATP5H							
	5484	6856	5746	6208	5640	6460	ATP synthase, H+ transporting, mitochondrial Fo complex, subunit d
LRPPRC	6282	5798	6514	5959	5510	6450	leucine-rich pentatricopeptide repeat containing
LDHB	7315	5742	6944	5502	6234	6436	LIM domain binding 3
EIF4H	7589	5574	7280	5308	6332	6426	eukaryotic translation initiation factor 4 gamma, 3
HP1BP3	6735	6208	6360	5920	5529	6413	homeobox D8
EPRS	6037	5780	6467	6893	6101	6393	epsin 3
PDHB	5683	5737	5835	5239	5502	6392	pyruvate dehydrogenase (lipoamide) beta
MXRA5	6179	5255	6385	6017	6617	6386	matrix-remodelling associated 5
LOC723981	6152	7392	6106	6626	6742	6374	cytochrome c oxidase subunit VIIb precursor
LOC104917012	6385	7423	5973	7052	7227	6363	plectin-like
LARP4B	4309	5296	4972	5782	6553	6356	La ribonucleoprotein domain family, member 4
EIF5	8221	6584	7295	5947	7005	6351	eukaryotic translation initiation factor 4H
P4HB	7082	5237	6750	4585	4969	6338	prolyl 4-hydroxylase, beta polypeptide
CISD1	5721	6169	5672	5668	6446	6325	cirrhosis, autosomal recessive 1A (cirhin)
NACA	6764	5741	6727	5577	5968	6298	nascent polypeptide-associated complex alpha subunit
SET	8195	5792	7345	5216	5767	6296	SET nuclear proto-oncogene
TGFB3	12290	6771	9779	6457	7706	6289	transforming growth factor, beta 3
NDUFA10							
	6039	6288	5877	6100	5908	6286	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 10, 42kDa
EIF4G1							
	7949	6057	6905	5855	6927	6281	eukaryotic translation initiation factor 4E nuclear import factor 1
LOC100551267	3443	5479	4433	7648	6632	6280	glycogen debranching enzyme
LOC100551038	3119	3515	4928	4852	4104	6263	cystathionine beta-synthase
NOLC1	7945	4985	6949	5141	6464	6247	nucleolar and coiled-body phosphoprotein 1
EIF3A							
	6458	6355	6386	7005	5917	6210	eukaryotic translation initiation factor 2, subunit 3 gamma, 52kDa
LOC100545950	7195	5152	6817	5935	6040	6205	UDP-glucose:glycoprotein glucosyltransferase 1
RBM20	4469	4641	5506	7074	5986	6200	RNA binding motif protein 20
SIAH1	5514	6409	5804	7092	5457	6187	siah E3 ubiquitin protein ligase 1
EIF2S3							
	6138	6219	6732	6615	5595	6169	eukaryotic translation initiation factor 2, subunit 2 beta, 38kDa
ANP32E							
	6754	5658	6468	5439	5401	6114	acidic (leucine-rich) nuclear phosphoprotein 32 family, member E
LOC100546836	2563	7193	4299	7078	5948	6102	uncharacterized LOC100546824
KLHL41	4222	6557	5543	8235	4327	6081	kelch-like family member 40
TOPBP1	6270	5237	5900	5009	5645	6081	topoisomerase (DNA) II binding protein 1
OTUD6B	5980	4687	6436	4523	6137	6080	OTU domain containing 6B
PALLD	5751	7488	6362	7088	5844	6077	palladin, cytoskeletal associated protein
HSPG2	8675	6707	7599	7467	7010	6056	heat shock 10kDa protein 1
LOC100547979	5231	5654	5693	6756	6922	6033	nucleoporin p58/p45-like
LMOD3	4420	6475	5293	6037	6922	6026	leiomodulin 2 (cardiac)
NDUFB1							
	4952	6809	5423	5830	6231	6026	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 1, 7kDa
PSMA5	5563	6133	5894	5442	6223	6019	proteasome (prosome, macropain) subunit, alpha type, 5
UBE2D3	6430	6713	6180	7321	5988	6007	ubiquitin-conjugating enzyme E2D 3
CLTB	6342	6210	5903	5693	5973	5998	clathrin, light chain A
AP2M1	7496	5753	6630	5473	5690	5983	adaptor-related protein complex 2, mu 1 subunit
HMGN3	5712	5563	5649	4888	5323	5971	high mobility group nucleosomal binding domain 2
HSPA2	8697	8935	6766	6209	6116	5958	heat shock 70kDa protein 14
NOP56	7364	5879	6499	5292	5861	5945	NOP56 ribonucleoprotein
FAU	4998	4898	4880	5257	4931	5930	FAT atypical cadherin 4
SETD7	6038	5217	6163	5658	6549	5920	SET domain containing (lysine methyltransferase) 7
NEXN	6279	6424	6749	7112	5859	5913	nexilin (F actin binding protein)
PEBP1	5730	5224	5634	5237	6395	5908	phosphatidylethanolamine binding protein 1
PRDX1	6974	4959	7003	4754	5928	5870	peroxiredoxin 1
EIF3B	6837	6028	6544	6480	5819	5852	eukaryotic translation initiation factor 3, subunit A
RPS28	5267	7990	5526	7003	6036	5847	ribosomal protein S28
VASH1	5710	5231	5678	6195	5360	5842	vasohibin 1
ENTPD2	5851	3621	5697	5351	7197	5838	ectonucleoside triphosphate diphosphohydrolase 1
ARHGDI1A	7671	5416	6270	4792	5563	5837	Rho GDP dissociation inhibitor (GDI) alpha
YME1L1	6437	5205	6199	5250	5686	5836	YME1-like 1 ATPase
RAB10	6151	5160	5867	5423	5904	5826	RAB10, member RAS oncogene family
ALDH6A1	4632	5725	4897	6961	6322	5821	aldehyde dehydrogenase 6 family, member A1
LOC100543106	5783	5872	5639	5052	6887	5811	quinone oxidoreductase-like protein 2
PPP3R1	5337	5441	5514	5134	5643	5810	protein phosphatase 3, regulatory subunit B, alpha
ADD3	4992	6059	4986	5118	6377	5804	adducin 3 (gamma)
LOC104911671	4837	4943	5118	6070	5888	5774	myc box-dependent-interacting protein 1-like
SYPL2	5655	4956	5692	4906	6413	5773	synaptophysin-like 2
DLD	5195	5255	4911	4748	5163	5764	dihydrolipoamide S-acetyltransferase
LOC104914052	6574	5232	5550	5125	6252	5727	junctophilin-2-like
EIF3M	5651	5243	5939	6080	4869	5722	eukaryotic translation initiation factor 3, subunit L
TSPAN9	5622	5558	5955	5456	5604	5720	tetraspanin 9

LOC100545745	5271	6249	4941	5334	5390	5720	homeobox protein CDX-4-like
FERMT2	6088	6875	6258	6720	5226	5712	fermitin family member 1
ALDH7A1	4374	5695	5000	5615	4062	5712	aldehyde dehydrogenase 7 family, member A1
ZNF706	4964	6114	5583	6389	5324	5710	zinc finger protein 706
PRDX3	5576	5595	5638	5406	5789	5703	peroxiredoxin 3
PANK3	6836	4040	6301	4622	5603	5697	pantothenate kinase 3
CCT3	7624	5237	6806	5307	6014	5696	chaperonin containing TCP1, subunit 2 (beta)
FBN1	6374	7364	5880	7731	8198	5695	fibulin 7
HMGB1	7386	5567	6741	5159	5388	5666	high mobility group 20B
BTG1	5441	4903	5949	7369	4599	5650	basic transcription factor 3-like 4
ACADL	4874	5955	5088	6271	5739	5644	acyl-CoA dehydrogenase, long chain
WDR1	6593	6227	6245	5369	5583	5615	WD repeat domain 1
CLIC4	5785	4858	5951	4606	5071	5607	chloride intracellular channel 3
FGFR4	6967	6535	6078	4604	4845	5604	fibroblast growth factor receptor 3
NONO	6697	5018	6139	4503	5171	5600	non-POU domain containing, octamer-binding
REEP1	4210	5232	4834	6196	6652	5592	receptor accessory protein 1
EIF5A2	6492	5305	6193	4731	4777	5587	eukaryotic translation initiation factor 5
CALM1	6166	5432	5968	6175	6788	5576	calcium homeostasis modulator 3
EIF3L	4924	5444	5115	5936	4932	5572	eukaryotic translation initiation factor 3, subunit K
CSNK1A1	5936	4935	5740	5233	5467	5526	CUB and Sushi multiple domains 2
RPN1	6867	5907	6467	5509	5355	5522	ribophorin I
NAP1L1	6715	5107	6504	5169	4928	5514	nucleosome assembly protein 1-like 1
SDHB							
	5342	5588	5012	5161	5243	5498	succinate dehydrogenase complex, subunit B, iron sulfur (lp)
PSMC2	5795	5546	5941	5539	5698	5497	proteasome (prosome, macropain) 26S subunit, ATPase, 2
CCT4	7190	4795	6502	4502	5447	5496	chaperonin containing TCP1, subunit 3 (gamma)
CCNG1	7757	5151	6764	4847	5876	5481	cyclin F
HNRNPM	6225	4604	5611	4515	4783	5448	heterogeneous nuclear ribonucleoprotein L
MCU	5298	5100	5757	5318	5457	5447	mitochondrial calcium uniporter
UGP2	4008	5823	3999	5313	4649	5443	UDP-glucose pyrophosphorylase 2
MPC1	4949	5288	4850	4642	5023	5433	mitochondrial pyruvate carrier 1
BTF3L4		4874	5699	4485	5269	5431	basic transcription factor 3
RAD21	5333	4915	5679	5059	4638	5431	RAD21 homolog (S. pombe)
ITGA6							
	8125	5515	7543	5419	5470	5426	integrin, alpha 4 (antigen CD49D, alpha 4 subunit of VLA-4 receptor)
ARPP19	6364	5149	5990	5122	5524	5422	cAMP-regulated phosphoprotein, 19kDa
ANKRD1	5532	7246	5607	7265	2832	5410	ankyrin repeat domain 1 (cardiac muscle)
SSPN	5868	6302	5355	5507	5936	5402	sarcospan
LOC100550679	6176	5379	6308	4670	5711	5386	NADH-cytochrome b5 reductase 3
LAMA4	5216	5063	5233	6385	5794	5386	laminin, alpha 3
SEPT10	6671	5029	6194	4692	5346	5377	septin 10
POPDC3	5168	3699	6137	5160	9146	5363	popeye domain containing 3
GPX1							
	5349	6120	4983	5214	5113	5357	glutamic pyruvate transaminase (alanine aminotransferase) 2
LOC100548098	5023	6809	5201	5523	5316	5351	mastermind-like protein 2
CS	5273	4692	4876	4716	5066	5350	crystallin, zeta (quinone reductase)-like 1
ENAH	9674	11635	8552	7299	5869	5349	engrailed homeobox 2
NAA15	6916	4925	6018	4895	5313	5339	N(alpha)-acetyltransferase 15, NatA auxiliary subunit
RBM5	5102	5567	5039	4967	4971	5324	RNA binding motif protein 5
PTP4A3	5133	6041	5073	6366	4538	5316	protein tyrosine phosphatase type IVA, member 3
MAPRE1	5915	4429	5764	4188	5202	5311	microtubule-associated protein, RP/EB family, member 1
ABCF2	5855	4574	5656	4644	5460	5274	ATP-binding cassette, sub-family F (GCN20), member 2
YWHAZ							tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta
	6502	4698	6036	4444	5327	5272	tripartite motif containing 63, E3 ubiquitin protein ligase
TRIM63	3838	5420	4356	8678	5054	5265	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 5
NDUFA5	3981	5380	4432	5027	4952	5257	ubiquitin specific peptidase 9, X-linked
USP9X	5333	4982	5323	5563	5474	5255	structural maintenance of chromosomes 2
SMC2	5949	4403	6416	4243	3421	5237	bladder cancer associated protein
BLCAP	5478	6060	5231	5428	6016	5235	signal recognition particle receptor (docking protein)
SRPR	5828	4796	5462	4800	5106	5216	ribosomal protein L34
RPL34	4662	6216	5301	5828	5206	5175	ring finger protein 10
RNF10	5355	5001	5016	5163	5352	5173	junctional adhesion molecule 2
JAM3	6646	4338	6469	4646	4942	5167	calponin 2
CNN3	6096	5221	5643	4766	4885	5143	neuromedin-K receptor
LOC100544806	3861	3960	4601	4934	6372	5138	GSK3B interacting protein
GSN	4051	6968	4769	9244	6483	5132	collagen alpha-1(I) chain-like
LOC104915953	6565	4673	7229	5575	4661	5128	
EIF2S2							
	5653	4636	5469	4473	4926	5124	eukaryotic translation initiation factor 2, subunit 1 alpha, 35kDa
PAFAH1B1							platelet-activating factor acetylhydrolase 1b, regulatory subunit 1
	5706	5009	5558	5011	4886	5121	(45kDa)
MPRIIP	6040	5725	5138	6087	5880	5114	myosin phosphatase Rho interacting protein
ACTR1A							
	5357	4642	5192	4758	4896	5112	ARP1 actin-related protein 1 homolog A, centractin alpha (yeast)
LOC100544899	6282	4648	5627	5217	5596	5111	solute carrier family 15 member 5-like
WWTR1	4914	5072	4949	5610	5556	5111	WW domain containing transcription regulator 1
LOC100539280	4941	5451	5244	5365	5518	5106	FYVE, RhoGEF and PH domain-containing protein 4
SRSF6	5767	5354	5247	5208	5131	5092	serine/arginine-rich splicing factor 6
PMPCA	5203	4346	4873	3862	4309	5079	peptidase (mitochondrial processing) alpha

HNRNPU	6210	5272	5747	5179	4913	5065	heterogeneous nuclear ribonucleoprotein R
RPS21	4753	6771	5091	6054	4722	5063	ribosomal protein S21
PPP1R3A	2737	4085	3553	5358	3913	5062	protein phosphatase 1, regulatory subunit 3A
HSPA4	6063	5366	5528	5593	4452	5047	heat shock 70kDa protein 2
ERLIN2	6335	4880	5722	4297	4556	5036	ER lipid raft associated 1
NAP1L4	5008	4390	5100	4494	4516	5030	nucleosome assembly protein 1-like 4
LOC104910408	4492	5405	4931	5009	5333	5023	cytochrome b-c1 complex subunit 7
IMMT							
	4791	4368	4426	4145	4771	5022	IMP2 inner mitochondrial membrane peptidase-like (S. cerevisiae)
ARF1	5496	4490	5267	4576	4906	5019	ADP-ribosylation factor 1
ATP1A1	6383	4962	5868	4741	5274	5019	ATPase, Na+/K+ transporting, alpha 1 polypeptide
SLC6A8							
	5516	6224	4421	5232	5799	5007	solute carrier family 6 (neurotransmitter transporter), member 8
BPGM	3264	4593	3755	5474	6943	5007	2,3-bisphosphoglycerate mutase
GAMT	3117	4953	3945	5577	4573	5005	galactose-1-phosphate uridylyltransferase
VLDLR	4106	4923	4507	5551	4187	5000	very low density lipoprotein receptor
SEC23A	4793	4302	4669	4650	4638	4988	Sec23 homolog A (S. cerevisiae)
SPPL2A	5013	4685	4943	5285	5544	4984	signal peptide peptidase like 2A
BT3	5257	4377	5305	4412	3962	4973	biotinidase
ABCE1	5764	4330	5545	4489	4731	4973	ATP-binding cassette, sub-family E (OABP), member 1
RPL22	4712	6110	4834	5513	4577	4971	ribosomal protein L22
GADL1							
	1961	3258	2270	2854	6295	4951	growth arrest and DNA-damage-inducible, gamma interacting protein 1
AP3M1	5582	4658	5229	4592	5001	4946	adaptor-related protein complex 3, mu 1 subunit
RGN	3034	4135	3323	4904	3913	4943	regucalcin
DNAJC7	6284	5092	5839	4676	4987	4939	DnaJ (Hsp40) homolog, subfamily C, member 6
NDUF85							
	4646	5169	5069	4767	5416	4938	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 5, 16kDa
LOC100540334	3895	5837	3943	6295	4713	4933	steroid 17-alpha-hydroxylase/17,20 lyase
NCOA4	5411	4613	5061	4608	4910	4926	nuclear receptor coactivator 4
HSPB8							
	5280	5718	5474	5945	4574	4925	heat shock 27kDa protein family, member 7 (cardiovascular)
ASB2	1865	2627	3284	5451	4431	4921	ankyrin repeat and SOCS box containing 2
IMPDH2	6670	6176	6096	5700	5547	4918	inositol monophosphatase domain containing 1
GLO1	4004	4759	4817	5633	6102	4916	glomulin, FKBP associated protein
ADK	4566	4011	4508	4058	4175	4916	adenosine kinase
EIF3D	5205	5580	4827	5642	4114	4913	eukaryotic translation initiation factor 3, subunit B
RCN1	5677	4258	5582	4056	4616	4891	reticulocalbin 1, EF-hand calcium binding domain
SAT1	3909	4726	4807	6035	7233	4881	spermidine/spermine N1-acetyltransferase 1
LOC100540816	4485	4798	4779	4105	5032	4874	Krueppel-like factor 13
PFN2	5554	4603	5332	4213	4668	4860	profilin 2
PSMD2							
	5676	4406	5420	4252	4725	4859	proteasome (prosome, macropain) 26S subunit, non-ATPase, 2
PPM1B	4737	4811	4700	4850	4466	4856	protein phosphatase, Mg2+/Mn2+ dependent, 1B
NDUF810							
	4553	5402	4173	4810	5215	4851	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 10, 22kDa
SERPINF1							serpin peptidase inhibitor, clade F (alpha-2 antiplasmin, pigment
	5044	5454	5879	4940	5508	4847	epithelium derived factor), member 1
PIIB	6209	4163	5252	3869	4397	4840	peptidylprolyl isomerase B (cyclophilin B)
COPB2	5145	4193	5181	4310	4169	4837	coatomer protein complex, subunit beta 1
LOC100545477	5582	4318	5358	3960	4480	4835	WD repeat-containing protein C2orf44 homolog
LOC104912179	4372	6076	5112	6362	5734	4814	transmembrane protein 182-like
FRMD3	2632	4304	3562	4600	3568	4803	FERM domain containing 1
PHKG1	3376	5821	4101	6540	7027	4796	phosphorylase kinase, gamma 1 (muscle)
TTL	5680	4534	5501	4702	4875	4793	tubulin tyrosine ligase
BZW2	5024	4128	5111	4524	5334	4792	basic leucine zipper and W2 domains 1
SAR1B	4764	4728	4795	4841	4916	4786	secretion associated, Ras related GTPase 1B
CCT7	5568	4304	4937	4345	4410	4785	chaperonin containing TCP1, subunit 6A (zeta 1)
LOC100548894	4916	4569	4285	4222	4478	4761	transcription cofactor HES-6-like
PRPF19	5362	4883	5168	4252	4595	4760	pre-mRNA processing factor 19
ARF4	5504	3894	4980	3614	4167	4755	ADP-ribosylation factor 4
SUCLA2	3895	4624	4128	4622	4373	4746	succinate-CoA ligase, ADP-forming, beta subunit
PTEN	5339	4655	5289	4824	4982	4746	phosphatase and tensin homolog
TFRC	4764	4110	4112	3149	4878	4738	transferrin receptor
MYOD1	4931	4616	4647	4887	4006	4729	myogenic differentiation 1
TPM3	6622	5372	6319	4716	6257	4722	tropomyosin 3
LOC100548306	4368	5929	4526	4719	4987	4716	zonadhesin-like
ELMO2	5589	4151	4967	4085	4653	4704	engulfment and cell motility 1
ADCK3	3435	5678	4113	5821	3951	4701	aarF domain containing kinase 3
CD164	4639	5022	4720	5144	4661	4699	CD163 molecule
CAPZB	4414	4343	4225	4468	4439	4698	capping protein (actin filament) muscle Z-line, alpha 3
ATP5J							
	3938	4949	4165	4519	4458	4694	ATP synthase, H+ transporting, mitochondrial Fo complex, subunit F6
MSN	4817	4132	4998	3882	4499	4664	moesin
EIF1	5559	5581	5161	4548	4819	4658	etoposide induced 2.4
LOC104916043	4606	4558	4644	4627	4467	4658	uncharacterized LOC104916043
HHA1	3826	3520	3072	3879	4324	4653	hedgehog acyltransferase
LOC100538921	4995	4779	5059	4836	3993	4653	ATP synthase F(0) complex subunit C2, mitochondrial-like
LOC104914682	4188	4572	3784	4113	4967	4653	basic transporter F family member 4-like

NSA2	4250	4275	4758	4526	3420	4640	NSA2 ribosome biogenesis homolog (S. cerevisiae)
PRPS1	5552	4224	4867	3962	4645	4629	phosphoribosyl pyrophosphate synthetase 1
PTPA42	5753	4950	5308	4397	4690	4628	protein tyrosine phosphatase type IVA, member 2
SMYD1	3874	4090	3927	4522	5105	4623	SET and MYND domain containing 1
YDJC	4260	4077	4297	4745	4733	4620	YdjC homolog (bacterial)
GOT1	3387	4016	3660	4114	4651	4620	golgi SNAP receptor complex member 2
NUDT16L1							
	5007	4107	4732	3914	4416	4619	nudix (nucleoside diphosphate linked moiety X)-type motif 16-like 1
HNRNPDL							heterogeneous nuclear ribonucleoprotein D (AU-rich element RNA binding protein 1, 37kDa)
	5205	4609	5116	4556	4477	4618	catechol-O-methyltransferase domain containing 1
COPA	4799	4077	4765	3955	4068	4618	adenosylmethionine decarboxylase 1
AMD1	5723	5267	4869	3874	4977	4602	Tax1 (human T-cell leukemia virus type I) binding protein 1
TAX1BP1	4339	4477	4528	4524	4357	4601	exportin-1
LOC104909481	5210	4041	5084	3930	4103	4600	succinate dehydrogenase complex, subunit D, integral membrane protein
SDHD							uncharacterized LOC104911752
	4126	4547	4240	3985	4280	4587	acetylserotonin O-methyltransferase
LOC104911752	5173	4309	4919	4494	3975	4582	kelch-like family member 30
LOC100547252	11817	3108	6368	7888	11949	4581	
KLHL31	2491	4057	3231	6463	4497		
ATPSI							
	3649	6579	4503	5792	3872	4580	ATP synthase, H+ transporting, mitochondrial Fo complex, subunit E
MGEA5	4176	5299	4173	5572	3982	4577	meningioma expressed antigen 5 (hyaluronidase)
FAM120A	5164	3994	4833	4673	4397	4571	family with sequence similarity 118, member B
THRAP3	4740	4626	4788	4366	4462	4569	thyroid hormone receptor associated protein 3
ADPRHL1	3890	6300	3779	4744	3729	4568	ADP-ribosylhydrolase like 1
DUSP22	4594	4046	3933	3405	3678	4566	dual specificity phosphatase 19
LOC104913168	1315	4487	1555	5354	3165	4565	SRSF protein kinase 3-like
SRSF3	5640	4268	5403	3619	4507	4563	serine/arginine-rich splicing factor 3
PSMCS	5271	4750	5067	4225	4568	4560	proteasome (prosome, macropain) 26S subunit, ATPase, 5
P4HA1	4846	4533	4831	4258	4237	4546	prolyl 4-hydroxylase, alpha polypeptide I
BICD2	4467	3979	4448	4682	4518	4545	bicaudal D homolog 2 (Drosophila)
EGF	3926	4151	4065	5301	4193	4545	elongation factor Tu GTP binding domain containing 2
SETD3	3871	4347	4202	4135	4858	4545	SET domain containing 3
CAMK2A	4832	3759	4317	3490	4096	4544	calcium/calmodulin-dependent protein kinase IG
EIF3H	4100	4714	4467	5060	4002	4544	eukaryotic translation initiation factor 3, subunit F
NDUFS3							NADH dehydrogenase (ubiquinone) Fe-S protein 3, 30kDa (NADH-coenzyme Q reductase)
	4390	4419	3933	4146	4491	4537	KDEL (Lys-Asp-Glu-Leu) containing 2
KDELRL2	5556	4390	5102	3624	4246	4531	growth differentiation factor 9
GDI2	5565	4538	5067	4507	4581	4529	sterol regulatory element binding transcription factor 2
SREBF2	5396	2944	5199	3897	4748	4520	splicing factor 3b, subunit 3, 130kDa
SF3B3	5040	4323	4469	3988	3969	4512	protein-L-isoaspartate (D-aspartate) O-methyltransferase
PCMT1	3600	4399	3755	4407	4282	4503	prohibitin
PHB	4474	4664	4501	4503	4356	4503	hydroxyacyl-CoA dehydrogenase
HADHA	5172	4750	4864	4279	3965	4500	uncharacterized LOC104916700
LOC104916700	9817	4514	7692	4390	5632	4498	death-associated protein kinase 1
DAPK2	6277	3886	5585	6154	4155	4497	myotilin
MYOT	3518	6237	3910	4582	3268	4493	
GNB1							
	5204	4111	5021	4218	4553	4489	guanine nucleotide binding protein (G protein), alpha z polypeptide
LOC100546087	3756	4671	3880	4851	4153	4483	serpin B6-like
OAT	4329	4461	4322	4729	4085	4477	ornithine aminotransferase
DARS	4067	3604	4006	3527	4008	4476	dual adaptor of phosphotyrosine and 3-phosphoinositides
ZYX	5781	5091	5353	4414	4821	4467	zyxin
MYH9	4717	4057	4976	4369	4441	4459	myosin, heavy chain 9, non-muscle
VDAC1	2906	3246	3436	3523	3555	4459	voltage-dependent anion channel 1
LINGO1	5108	3527	4830	4029	5520	4440	lin-9 DREAM MuvB core complex component
SNRPD3	4217	4291	4130	3781	3526	4437	small nuclear ribonucleoprotein D3 polypeptide 18kDa
SMARCE1							SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 1
	5319	4320	5058	4342	4241	4436	ribosomal protein L38
RPL38	4652	5621	4729	4929	4647	4435	adenylosuccinate lyase
ADSL	3994	5342	4185	5769	4206	4434	
ATPSO							
	4229	4623	4327	4323	4529	4434	ATP synthase, H+ transporting, mitochondrial F1 complex, O subunit
IDE							
	4409	4065	4336	4585	4590	4426	inhibitor of DNA binding 4, dominant negative helix-loop-helix protein
LOC100548280	3341	3483	3793	4187	5089	4420	cytochrome P450 2K4-like
RAB7A	4261	3755	4235	3743	4174	4418	RAB7A, member RAS oncogene family
LOC100551229	7035	3740	5486	3928	4328	4415	tubulin beta chain-like
UBE2G1	5285	4653	5241	5109	5598	4408	ubiquitin-conjugating enzyme E2G 1
LOC100544896	4749	8266	4278	4821	3564	4406	cytoplasmic phosphatidylinositol transfer protein 1-like
NDUFS2							NADH dehydrogenase (ubiquinone) Fe-S protein 2, 49kDa (NADH-coenzyme Q reductase)
	4161	4736	4197	4111	4182	4387	sodium/potassium-transporting ATPase subunit alpha-2
LOC104915899	3639	5433	3447	6035	4900	4386	DDRKG domain containing 1
DDX1	4357	3859	4294	4127	4440	4379	ribosomal protein S29
RPS29	4195	5650	4311	4743	4086	4363	cyclin T2
CCNYL1	5253	4090	4928	4180	4582	4361	proteasome (prosome, macropain) 26S subunit, ATPase, 3
PSMC3	5009	4512	4751	4095	4250	4361	chromodomain helicase DNA binding protein 2
CHD4	4684	4441	4540	5544	4607	4355	ribosomal protein L22-like 1
RPL22L1	2974	3970	4678	5544	4790	4355	

TOP2A	5811	3830	5147	3633	3850	4349	topoisomerase (DNA) II alpha 170kDa
NDUF57							NADH dehydrogenase (ubiquinone) Fe-S protein 7, 20kDa (NADH-coenzyme Q reductase)
LOC104911731	3914	4667	3905	3809	4214	4347	calcium-binding mitochondrial carrier protein Aralar1-like
COTL1	1994	3962	2518	3609	3808	4332	cortistatin
AQP4	4922	3708	4370	3984	4361	4331	aquaporin 4
ACSBG2	3108	3811	3268	3423	3403	4330	acyl-CoA synthetase bubblegum family member 2
GRB2	2788	1850	2703	2492	3457	4327	growth factor receptor-bound protein 10
LOC104917166	4897	3743	4338	3553	4038	4318	uncharacterized LOC104917166
TMOD4	3586	2590	2996	2603	3491	4307	tropomodulin 4 (muscle)
PRPF8	4034	4836	4340	5585	5439	4303	pre-mRNA processing factor 8
HDGF	4787	3996	4363	4224	3955	4303	HD domain containing 2
ARCN1	4800	4194	4448	4208	4461	4293	archain 1
UBE2N	5005	4097	4665	3689	4334	4286	ubiquitin-conjugating enzyme E2N
IDH3B	4118	3648	4182	3865	4201	4275	isocitrate dehydrogenase 3 (NAD+) alpha
EIF1AX	3987	4328	3809	3858	3732	4265	eukaryotic translation initiation factor 1
SNTB1	5144	3871	4825	3744	4285	4262	syntrophin, beta 1 (dystrophin-associated protein A1, 59kDa, basic component 1)
HADHB	3225	4643	3204	4279	3227	4252	hydroxyacyl-CoA dehydrogenase/3-ketoacyl-CoA thiolase/enoyl-CoA hydratase (trifunctional protein), alpha subunit
PSMA4	4225	5349	4140	4071	3651	4237	proteasome (prosome, macropain) subunit, alpha type, 4
SERINC1	5153	3785	4938	3821	3818	4235	serine incorporator 1
PSMC6	3355	4188	3862	4665	4128	4231	proteasome (prosome, macropain) 26S subunit, ATPase, 6
CAPZA1	4243	3721	4382	3711	3769	4227	calcyphosine-like
DYRK3	4429	3517	4218	3624	4385	4204	dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 2
SAP18	3827	4661	3874	4550	4935	4200	Sin3A-associated protein, 18kDa
SURF4	4616	4015	4536	3567	4117	4198	surfeit 4
NRP1	4824	3886	4583	3757	3922	4192	neuropilin 1
PSMB7	4904	3758	4727	4076	4570	4186	proteasome (prosome, macropain) subunit, beta type, 7
PSMD13	4378	4038	4230	3746	3865	4184	proteasome (prosome, macropain) 26S subunit, non-ATPase, 13
SUN1	4471	4145	4301	3970	3842	4184	Sad1 and UNC84 domain containing 1
DAG1	2980	3299	3494	4370	3357	4168	defender against cell death 1
SEPT12	4981	5041	4701	4987	4657	4162	septin 12
PDCL3	5289	3463	4950	3997	3845	4158	phosducin-like 3
MRPS11	3233	3536	3667	3809	3828	4154	mitochondrial ribosomal protein S11
CEP350	3863	3792	3947	3744	4112	4150	centrosomal protein 290kDa
LOC100548465	3098	3570	3289	5254	4715	4148	ubiquitin-conjugating enzyme E2 D3-like
LOC100550832	3744	4294	3831	3944	3786	4145	liprin-beta-1
ETF1	4161	3942	4229	3899	4128	4144	Ewing tumor-associated antigen 1
LOC100551022	3769	3772	3829	3684	3688	4142	clathrin heavy chain 1
PDCC6IP	5297	3713	4602	3427	3964	4141	programmed cell death 6 interacting protein
KARS	5098	3728	4766	4244	4536	4130	KAT8 regulatory NSL complex subunit 3
RAI14	4988	3738	4506	3571	4096	4123	retinoic acid induced 14
LOC100549259	4355	4028	4288	3767	3451	4117	ATP-binding cassette sub-family D member 2
LOC100549107	2813	2936	3870	6771	3746	4100	mitochondrial amidoxime reducing component 1
LRRFIP1	3850	4513	4134	3968	4237	4093	leucine rich repeat (in FLII) interacting protein 1
ATP6V1G1	3904	4019	3724	4516	4662	4080	ATPase, H+ transporting, lysosomal 13kDa, V1 subunit G1
RPN2	4073	4066	3979	3508	3906	4080	ribophorin II
H3F3A	5200	3433	4803	3231	3869	4064	GDNF-inducible zinc finger protein 1
SMIM11	3863	4630	3907	4235	3697	4062	small integral membrane protein 11
KLHL40	3967	4972	4123	4725	4202	4061	kelch-like family member 4
CTBP1	3054	5525	3324	3740	3154	4061	CTAGE family, member 5
LOC100548989	4020	3291	3999	3731	3851	4061	feather keratin B-4-like
SPTB	3348	4098	3091	4347	3290	4051	spectrin, beta, erythrocytic
UBR4	3797	4503	3776	4916	4268	4049	ubiquitin protein ligase E3 component n-recognin 4
FBXO9	4851	3957	4512	4528	4369	4048	F-box protein 8
ERH	3240	3420	3411	3121	3691	4044	ERGIC and golgi 3
SUB1	4591	3858	4340	3350	3634	4032	SUB1 homolog (S. cerevisiae)
ATP5D	4461	3936	4538	3525	3712	4015	ATP synthase, H+ transporting, mitochondrial F1 complex, delta subunit
LOC100545668	3787	4654	3852	3982	4273	4010	uncharacterized LOC100545666
LOC100546378	3509	3791	3511	3300	3315	4008	BPI fold-containing family 8 member 4-like
HMGB3	4657	4887	4060	4538	5437	4008	high mobility group box 2
USMG5	5001	3862	4664	3385	3712	4004	up-regulated during skeletal muscle growth 5 homolog (mouse)
HMGB2	3651	4360	3954	3779	4028	4003	high mobility group box 1
LOC104911690	4551	3686	4742	3384	3422	4002	striated muscle-specific serine/threonine-protein kinase-like
METTL23	3886	4303	3421	3847	4377	3999	methyltransferase like 23
TRIM54	4832	3864	4381	3239	3620	3990	tripartite motif containing 54
NDFIP1	4161	3535	3939	3635	4386	3971	Nedd4 family interacting protein 1
COP54	4058	3685	3770	3523	3725	3970	COP9 signalosome subunit 3
LOC100550313	3713	3326	3697	3327	3766	3963	interleukin-6 receptor subunit beta-like
PDGFRB	3901	3579	4064	3413	3458	3956	platelet-derived growth factor receptor, beta polypeptide
VPS35	4857	3308	4500	3664	4603	3952	vacuolar protein sorting 35 homolog (S. cerevisiae)
FBXO32	4153	3297	4046	3427	3347	3945	F-box protein 31
	527	1131	1547	3700	610	3945	

PDIA4	4788	3506	4451	3651	3427	3940	protein disulfide isomerase family A, member 4
BMPR2	3372	3374	3477	3846	3978	3940	bone morphogenetic protein receptor, type II (serine/threonine kinase)
WIPF3	4287	3752	4268	4487	3554	3940	WAS/WASL interacting protein family, member 3
TRAP1	4424	3427	4003	3244	3281	3939	TNF receptor-associated protein 1
IARS	4502	3513	4458	3553	3765	3933	islet amyloid polypeptide
RAC1	4731	3600	4501	3626	3810	3928	ras-related C3 botulinum toxin substrate 1 (rho family, small GTP binding protein Rac1)
KCTD2	3715	3337	3623	3388	3282	3928	potassium channel tetramerization domain containing 19
LOC100549826	4692	3862	4287	3608	3886	3928	serum amyloid A like 1
TRIM55	3481	3942	3729	4897	4217	3926	tripartite motif containing 55
NHP2L1	4268	3326	4135	3142	3715	3923	NHP2 non-histone chromosome protein 2-like 1 (S. cerevisiae)
COL18A1	4310	4537	3891	5039	4524	3922	collagen, type XVII, alpha 1
NDUUFV1	3739	3731	3652	3460	3772	3921	NADH dehydrogenase (ubiquinone) flavoprotein 1, 51kDa
C14H9orf89	4042	3841	3838	3586	4202	3913	chromosome 14 open reading frame, human C3orf67
TM9SF3	4589	3833	4436	3627	3824	3904	transmembrane 9 superfamily member 3
TWF2	3238	3685	3072	3906	3654	3898	twinfilin actin-binding protein 2
TPM2	5600	6511	4427	4802	3490	3897	tropomyosin 2 (beta)
PSMD7	4393	3674	4158	3668	3791	3896	proteasome (prosome, macropain) 26S subunit, non-ATPase, 7
EIF2S1	4693	3383	4499	3439	3970	3889	eukaryotic translation initiation factor 2D
LOC100548286	3996	3859	4116	3660	4005	3888	band 4.1-like protein 3
C16H16orf72	3835	3744	4022	3951	4012	3886	chromosome 16 open reading frame, human C16orf59
PRKACB	4231	3845	4159	3578	3601	3881	protein kinase, cAMP-dependent, catalytic, beta
LOC104912884	2204	2771	2749	3067	3809	3879	chloride channel protein 1-like
TRIO	3685	3531	3855	4152	3848	3868	trio Rho guanine nucleotide exchange factor
AIFM1	3853	3604	3553	3202	3421	3866	apoptosis-inducing factor, mitochondrion-associated, 1
STAU1	3295	3713	3320	4137	2838	3861	staufen double-stranded RNA binding protein 1
TMEM201	2959	3222	3456	4737	3125	3859	transmembrane protein 201
ACAT1	3760	5214	3828	4519	3756	3854	acetyl-CoA acetyltransferase 1
LOC104913969	3735	3830	3667	3583	3709	3850	uncharacterized LOC104913969
AKAP1	3034	3845	3096	3612	3431	3846	A kinase (PRKA) anchor protein 1
EIF5B	4113	3387	3728	3353	3574	3835	eukaryotic translation initiation factor 5A2
TOMM20	3966	3615	3890	3397	3500	3830	translocase of outer mitochondrial membrane 20 homolog (yeast)
CBX3	4331	3642	3972	3480	3628	3828	chromobox homolog 2
SPTBN1	4926	3708	4680	3978	4135	3827	spectrin, beta, non-erythrocytic 1
IPO5	4154	3843	4321	4222	3309	3823	importin 13
DLST	3125	3044	3051	3298	3159	3819	delta-like 4 (Drosophila)
COQ9	3569	4138	3698	3750	4051	3818	coenzyme Q7 homolog, ubiquinone (yeast)
PTMA	4813	3452	4134	2969	3289	3818	prothymosin, alpha
ALDH1L2	2311	4249	2835	4370	2577	3818	aldehyde dehydrogenase 1 family, member L2
SRPRB	3674	3213	3506	2963	3342	3818	signal recognition particle receptor, B subunit
CISH	3911	4439	3986	3486	3902	3816	CDGSH iron sulfur domain 3
GFM1	3731	3642	3944	3130	4606	3805	growth factor independent 1B transcription repressor
FYCO1	3710	3946	3565	4266	3460	3794	FYN binding protein
LOC100539689	5119	4213	4538	4217	3862	3793	fatty acid-binding protein, liver
XPOT	4544	3352	4400	3509	3795	3793	exportin, tRNA
PCBP2	4712	3401	3883	3644	3709	3791	poly(rC) binding protein 2
PLXND1	4255	3314	4185	3787	4287	3789	plexin D1
MICAL1	4044	3420	3946	3909	3253	3785	microtubule associated monoxygenase, calponin and LIM domain containing 1
RSRP1	5074	3850	4103	3452	4338	3784	arginine/serine-rich protein 1
UBP1	4139	3340	4043	3402	3917	3770	upstream binding protein 1 (LBP-1a)
AZIN1	3712	3454	3568	3764	3945	3769	antizyme inhibitor 1
ATP6VOC	4154	3707	3934	3272	3559	3765	ATPase, H+ transporting, lysosomal 16kDa, V0 subunit c
HDAC2	4169	3083	4057	3517	3293	3764	histone deacetylase 11
ADNP	4749	3461	4536	3604	4071	3757	activity-dependent neuroprotector homeobox
LOC100541608	4183	3292	3967	3247	3558	3754	acetyl-coenzyme A synthetase 2-like, mitochondrial
CANX	4796	3326	4386	3148	3299	3752	calcium activated nucleotidase 1
MEF2A	3744	3504	3825	3887	3787	3752	myocyte enhancer factor 2A
SDC2	3382	3421	3882	3649	4328	3750	syndecan 2
ACAD9	3771	4628	3836	3707	2763	3747	acyl-CoA dehydrogenase family, member 9
CLPX	3264	3635	3469	3792	3103	3744	CLPTM1-like
CRY1	3875	3817	3605	3999	3489	3743	CREB regulated transcription coactivator 1
HIBADH	3130	3593	3343	3340	3485	3738	hippocampus abundant transcript 1
NAV2	3105	4425	3074	3462	3256	3736	neuron navigator 2
MRPL18	3856	3819	3634	3269	3773	3736	mitochondrial ribosomal protein L18
FUND2	4035	3978	3823	3865	3839	3735	FUN14 domain containing 1
PKIA	2421	3512	3040	4004	3218	3729	protein kinase (cAMP-dependent, catalytic) inhibitor alpha
LOC104909591	4749	3621	4455	4153	3721	3729	cold shock domain-containing protein E1
ADD1	4440	3700	4112	3460	3612	3719	adducin 1 (alpha)
CARN51	1968	3626	2650	3817	4184	3716	carbohydrate kinase domain containing
DUSP27	3522	3189	3371	3677	3535	3714	dual specificity phosphatase 26 (putative)
NDUFB9	3676	4589	3841	3757	3581	3711	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 9, 22kDa
LOC104916619	13719	2353	10357	1704	12437	3709	myosin light chain 3, skeletal muscle isoform-like
LOC100547911	7738	8072	7080	4877	3965	3709	lysosomal alpha-glucosidase-like

SMAD5	4094	3516	3874	3335	3528	3707	SMAD family member 5
LOC100538560	3222	941	3581	1532	2480	3704	C-type lectin domain family 2 member B
NCAM1	4188	2908	4272	3591	4042	3703	neural cell adhesion molecule 1
HK1	3399	3705	3441	4367	4065	3702	Holliday junction recognition protein
HSPE1	4597	3974	4239	3426	3584	3702	heat shock 60kDa protein 1 (chaperonin)
PSMD1							
	4263	2899	4189	3268	3488	3657	proteasome (prosome, macropain) 26S subunit, non-ATPase, 1
CILP	3617	4128	3674	4100	3561	3650	class II, major histocompatibility complex, transactivator
DDX17	3924	3261	3706	4079	3907	3645	DEAD/H (Asp-Glu-Ala-Asp/His) box helicase 11
CDV3	4620	3107	4081	3181	3460	3643	chromatin licensing and DNA replication factor 1
TMTC1	3836	4223	3719	3734	3371	3643	transmembrane and tetratricopeptide repeat containing 1
LOC100547732	3798	3298	3756	3197	3735	3636	cytosolic phospholipase A2 beta-like
ACADSB	3253	3168	3166	3089	3109	3627	acyl-CoA dehydrogenase, short/branched chain
PSMA7	3993	3321	4035	3139	3304	3625	proteasome (prosome, macropain) subunit, alpha type, 7
LRIG1	4925	3821	4163	3422	3655	3623	leucine-rich repeats and immunoglobulin-like domains 1
CHP1	2678	2928	2525	2862	3787	3619	cysteine and histidine-rich domain (CHORD) containing 1
HNRNPAB	4410	3144	4097	3212	3594	3616	heterogeneous nuclear ribonucleoprotein A3
C4H20orf194	2966	2855	3188	2712	2468	3613	chromosome 3 open reading frame, human C8orf76
MTPN	4503	3555	4158	3303	3340	3610	myotrophin
SON	3835	3355	3664	3903	3681	3609	SON DNA binding protein
LOC104914945	2720	4167	3593	3286	3287	3605	uncharacterized LOC104914945
TRAK1	3348	3855	3150	3493	3711	3604	trafficking protein, kinesin binding 1
BLMH	3955	3205	3743	3260	3316	3591	bleomycin hydrolase
FH	3741	3608	3742	3466	3633	3587	fibrinogen-like 2
SPON2	3356	3025	3409	4098	2740	3587	spondin 2, extracellular matrix protein
HNRNPK	3647	3090	3658	3074	2950	3582	heterogeneous nuclear ribonucleoprotein H3 (2H9)
ELAVL1	4031	3191	3863	3232	3622	3578	elaC ribonuclease Z 2
CLTCL1	3062	3167	2974	3696	3397	3574	clathrin, light chain B
LOC104914561	2796	3418	2779	3049	3273	3572	hexamethylene bisacetamide inducible 1
FAM134B	939	3725	2208	4602	1794	3570	family with sequence similarity 134, member A
TXLNB	2738	3421	3319	4065	4397	3556	taxilin beta
LOC100550153							
	3745	3855	3886	3295	2979	3555	glycerol-3-phosphate dehydrogenase [NAD(+)], cytoplasmic-like
TOB1	2869	3644	2987	3472	3790	3548	transducer of ERBB2, 1
PSMA2	3813	3392	4004	3156	3164	3547	proteasome (prosome, macropain) subunit, alpha type, 2
KLC4	3798	3876	3662	3835	3642	3545	kinesin light chain 1
USP20	3153	3220	3324	3438	3454	3545	ubiquitin specific peptidase 20
SDHC							succinate dehydrogenase complex, subunit C, integral membrane
	3888	3399	3590	3156	3784	3543	protein, 15kDa
LOC100541865	1460	2055	1666	2889	4409	3542	RNA polymerase-associated protein RTF1 homolog
BAG2	3728	3485	3577	3596	3645	3535	BCL2-associated athanogene 2
CLIP4	2477	2320	1970	2463	2367	3532	CAP-GLY domain containing linker protein 2
MAP3K7	3845	3394	3791	3791	3786	3524	mitogen-activated protein kinase kinase kinase 7
LOC100549801	2918	3292	3087	3095	3789	3523	msx2-interacting protein-like
ANO8	2363	3983	2518	4739	4342	3513	anoctamin 8
PSMA3	4239	3333	3903	3079	3222	3511	proteasome (prosome, macropain) subunit, alpha type, 3
PSMA1	3896	3378	3686	3120	3164	3508	proteasome (prosome, macropain) subunit, alpha type, 1
LOC104912436	3288	3425	3347	3588	3372	3502	ubiquitin carboxyl-terminal hydrolase 24-like
CCDC141	2026	2994	2813	3933	2938	3493	coiled-coil domain containing 14
EML6	2864	3737	2844	3336	3250	3491	echinoderm microtubule associated protein like 5
SUCLG2	3143	3170	3016	3017	2834	3491	succinate-CoA ligase, GDP-forming, beta subunit
LMOD2	2893	4814	3277	4469	1511	3483	leiomodlin 1 (smooth muscle)
CSH14orf166	3717	3736	3719	3472	3484	3470	chromosome 5 open reading frame, human C14orf159
ZC3H13	3674	3548	3568	3293	3141	3469	zinc finger CCCH-type containing 13
LOC100540358	4141	3134	3703	3212	3295	3458	RNA-binding protein 4B-like
PTPRS	4170	3845	3917	3663	3496	3457	protein tyrosine phosphatase, receptor type, S
PSMC1	3682	3080	3570	2998	3052	3451	proteasome (prosome, macropain) 26S subunit, ATPase, 1
PNRC2	3496	3162	3461	3007	3697	3443	proline-rich nuclear receptor coactivator 2
SEMA6B							sema domain, transmembrane domain (TM), and cytoplasmic domain,
	3351	3043	3552	3816	3336	3442	(semaphorin) 6B
TIMP2	3806	3779	3788	3268	3707	3442	TIMP metalloproteinase inhibitor 2
METAP2	3802	3221	3637	3328	3548	3440	methionyl aminopeptidase 2
ILF2	4022	3165	3580	2848	3342	3437	immunoglobulin-like domain containing receptor 2
PSMB4	3751	3858	3720	3300	3401	3431	proteasome (prosome, macropain) subunit, beta type, 4
SPG7							
	3723	3582	3531	3631	3711	3429	spastic paraplegia 7 (pure and complicated autosomal recessive)
FGFR1	3726	3396	3437	3333	2965	3424	fibroblast growth factor binding protein 2
LMO7	2413	4019	2853	3652	2597	3421	LIM domain only 4
BTBD1							BTA1F1 RNA polymerase II, B-TFIID transcription factor-associated,
	3497	4128	3534	3608	3293	3418	170kDa
API5	3675	3152	3581	3115	3241	3418	apoptosis inhibitor 5
HMG1							
	4124	2941	4152	2665	2986	3414	3-hydroxy-3-methylglutaryl-CoA synthase 2 (mitochondrial)
IFRD1	4382	3857	4101	2961	3746	3411	interferon, lambda receptor 1
CD63	3337	3892	3409	3375	3485	3400	CD6 molecule
LOC104913587	3470	3100	3437	3001	3179	3399	dynein light chain 1, cytoplasmic-like
RBM39	3822	3431	3647	3358	3297	3399	RNA binding motif protein 39
ALDOC	5138	3311	4323	2771	3983	3395	aldolase C, fructose-bisphosphate
LAMP1	3395	3360	3586	3585	3321	3395	laminin, gamma 3

EIF4A3	3735	3083	3483	2905	3156	3383	eukaryotic translation initiation factor 4A2
GYG1	3729	3711	3787	3705	3703	3382	glucoside xylosyltransferase 2
TSPAN3	3265	3309	3324	3277	3085	3379	tetraspanin 3
SRBD1	2935	2725	3267	3171	3721	3378	S1 RNA binding domain 1
LIFR	2955	4527	3160	3430	3059	3378	leukemia inhibitory factor
NUDT4							
	3471	4307	3485	3668	3208	3374	nudix (nucleoside diphosphate linked moiety X)-type motif 4
RAF1	3558	3379	3653	3182	3490	3371	Raf-1 proto-oncogene, serine/threonine kinase
GORASP2	3985	3165	3698	3191	3435	3363	golgi reassembly stacking protein 1, 65kDa
USP25	3413	4606	3819	4574	3098	3363	ubiquitin specific peptidase 25
PDIAG	4019	2979	3540	2909	2996	3363	protein disulfide isomerase family A, member 6
USP2	3551	3283	3268	2850	3734	3361	ubiquitin specific peptidase 2
UPF1	4278	3256	3824	3185	3513	3359	UPF1 regulator of nonsense transcripts homolog (yeast)
GLYR1	3608	3134	3304	3027	3236	3355	glycerate kinase
GARS	3519	2825	3532	2749	2987	3353	GTPase activating Rap/RanGAP domain-like 3
TSPAN7	4497	3213	3530	3565	4492	3352	tetraspanin 7
SYNCRIP							
	3861	3292	3531	3148	3325	3347	synaptotagmin binding, cytoplasmic RNA interacting protein
DYRK1A	2734	3241	3122	3338	3469	3347	dynein, light chain, Tctex-type 3
M6PR	3483	2981	3452	3074	3272	3345	mannose-6-phosphate receptor (cation dependent)
NT5C2	4058	4580	3601	3744	3217	3345	5'-nucleotidase, cytosolic II
LOC104909961	2469	3379	2740	3396	3316	3340	dystonin-like
LOC100539142	3808	3571	3468	3238	2940	3329	transcription factor E2F5-like
PSMB2	3455	3051	3616	2840	3135	3329	proteasome (prosome, macropain) subunit, beta type, 2
MYO18A	3545	3607	3356	4148	3388	3326	myosin XVIIIa
HECTD1	3128	3155	3123	3592	3274	3325	headcase homolog (Drosophila)
USP15	2727	3106	2943	3902	3571	3323	ubiquitin specific peptidase 15
FDF1	3311	2014	3617	2335	2646	3317	FCH and double SH3 domains 2
TIMM17A							
	3218	3364	3224	2870	3214	3311	translocase of inner mitochondrial membrane 17 homolog A (yeast)
ANXA2	4423	3466	3945	2828	3838	3309	annexin A2
LYPLA1	3231	3197	3390	3153	3106	3305	lysophospholipase I
SYNGR1	3812	3627	3295	3484	3568	3302	synaptogyrin 1
GPRC5B	2141	2390	2578	3100	2800	3302	G protein-coupled receptor 97
PSMD3							
	3881	2911	3692	3023	3145	3299	proteasome (prosome, macropain) 26S subunit, non-ATPase, 3
KLHL30	3796	3467	3531	3572	3281	3296	kelch-like family member 3
FN1	4490	3883	4279	3869	4310	3294	fragile X mental retardation 1 neighbor
TOP2B	3581	3050	3576	3170	3078	3294	topoisomerase (DNA) II beta 180kDa
SEPT3	4043	2801	3918	2862	3408	3285	septin 3
DYRK2							
	3308	4158	3267	3664	3300	3284	dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 1A
PPP2R2A	4026	2952	3605	3065	3308	3279	protein phosphatase 2, regulatory subunit B, alpha
CNOT1							
	3372	3070	3255	3002	3095	3278	cyclin and CBS domain divalent metal cation transport mediator 4
PLXNA1	4097	2713	3836	3157	3290	3277	plexin A1
ASB12	3060	3027	2800	3258	4421	3273	ankyrin repeat and SOCS box containing 12
NDUFV2	3434	2935	3372	3045	3104	3271	NADH dehydrogenase (ubiquinone) flavoprotein 2, 24kDa
KIF1B	3444	3538	3534	4446	3651	3266	kinesin family member 19
LOC100544443	3905	3118	3792	3746	3019	3265	glycerol-3-phosphate acyltransferase 3-like
COMT	4093	2814	3881	3139	4066	3261	cartilage oligomeric matrix protein
LOC100548773							
	4340	2911	3697	2665	3261	3260	arylamine N-acetyltransferase, pineal gland isozyme NAT-10
COL4A5	3703	4401	3357	5031	2657	3258	collagen, type IV, alpha 4
CASC4	3635	3223	3424	3036	3142	3254	cancer susceptibility candidate 3
CKAP2	3634	2930	3433	2915	2556	3254	CDKN1A interacting zinc finger protein 1
PGP	2448	2586	2612	2732	3105	3243	phosphoglycolate phosphatase
PSAP	2740	2931	2887	3194	2893	3241	prosaposin
PRKAA2	2700	3028	2862	3532	4005	3238	protein kinase, AMP-activated, alpha 2 catalytic subunit
LOC104913504	3546	2357	3741	2553	3354	3237	uncharacterized LOC104913504
LOC100546323	4019	2937	3412	3035	3454	3236	hemopexin-like
LAPTM4A	3391	3696	3254	3316	3474	3236	leucine aminopeptidase 3
SRRM1	3475	3140	3222	3086	3061	3236	serine/arginine repetitive matrix 1
SKP1	3462	3035	3420	2974	3038	3232	S-phase kinase-associated protein 1
MAP3K7CL	5160	3772	5555	3776	4853	3232	MAP3K7 C-terminal like
SYNPO2	3279	2802	2960	3541	3009	3229	synaptopodin 2
RPS6KA3	2938	3916	2761	3625	2801	3229	ribosomal protein S6 kinase, 90kDa, polypeptide 3
NRD1	3927	3263	3650	3249	3241	3227	nardilysin (N-arginine dibasic convertase)
RAB2A	3143	3620	3329	3248	2959	3225	RAB2A, member RAS oncogene family
PSMA6	3479	3377	3375	3141	2931	3222	proteasome (prosome, macropain) subunit, alpha type, 6
DBNDD2							
	2537	2894	2743	3028	3222	3222	dysbindin (dystrobrein binding protein 1) domain containing 1
CLCN1	1814	2100	2261	2734	3284	3221	cardiotrophin-like cytokine factor 1
ANXA5	3921	3070	3740	2721	3319	3221	annexin A5
PPP1R7	2842	3304	2836	3014	2804	3218	protein phosphatase 1, regulatory subunit 7
NOP58	4829	2987	4538	2770	4446	3217	NOP58 ribonucleoprotein
HSPB1	3583	3252	3573	2919	3292	3212	heparan sulfate 6-O-sulfotransferase 3
ANKRD10	3057	2939	3148	3256	2994	3210	ankyrin repeat domain 10
SRSF11	3515	3004	3119	2934	3056	3209	serine/arginine-rich splicing factor 11

ALDH18A1	3184	2385	3578	2028	2718	3209	aldehyde dehydrogenase 18 family, member A1
CLIC5	2661	3562	2623	3011	3414	3209	chloride intracellular channel 4
LOC104914677	2412	1804	2384	1918	2726	3203	uncharacterized LOC104914677
MYBP1	3677	6157	3569	4104	2739	3203	myosin binding protein C, slow type
AKR1A1							
	3855	2707	3954	2964	3584	3197	aldo-keto reductase family 1, member A1 (aldehyde reductase)
CSH11orf58	3251	3198	3215	2760	2699	3196	chromosome 5 open reading frame, human C11orf49
TMEM255A	2782	2652	2951	2798	3946	3195	transmembrane protein 255A
FGF13	2963	3686	3121	3462	2881	3194	fibroblast growth factor 12
LOC100548709	4025	3528	3546	3340	3555	3190	epithelial chloride channel protein-like
RARS	3736	2936	3554	2826	3155	3190	arginyl-tRNA synthetase
PPID	3006	3002	3208	2991	3086	3186	peptidylprolyl isomerase D
TRDN	3102	3150	3093	4112	3919	3179	triadin
HINT1	2988	3540	3375	2882	2455	3177	histone H4 transcription factor
PCNA	4549	3262	4071	2458	2683	3175	proliferating cell nuclear antigen
SNX3	2979	3105	3183	3050	3424	3175	sorting nexin 3
DHRS7C	2711	3668	3039	3693	3230	3174	dehydrogenase/reductase (SDR family) member 7B
SOD1	3131	3044	3248	2731	2989	3173	superoxide dismutase 1, soluble
SH3BP5	2716	3012	2679	3210	2900	3171	SH3-domain binding protein 5 (BTK-associated)
LOC100547354	3717	2852	3498	2760	3084	3166	GTPase HRas pseudogene
NCOR1	2836	2383	2834	3149	3577	3163	nuclear receptor corepressor 1
ZNF207	3351	2763	3276	2937	3150	3162	zinc finger protein 207
MYH10	3652	3576	3524	2880	2809	3161	myosin, heavy chain 10, non-muscle
CCDC80	3757	3198	3844	3032	3475	3160	coiled-coil domain containing 79
LOC104917002	2876	3172	2948	2876	3158	3154	cytochrome c oxidase subunit 6B1
TRMT1L	3372	2789	3178	2873	3155	3152	tRNA methyltransferase 1 homolog (S. cerevisiae)-like
LOC104913910	3232	3094	3459	2744	3039	3150	WD repeat and SOCS box-containing protein 1
LOC100545924	3696	3159	3443	3175	3016	3150	ATP synthase subunit alpha, mitochondrial-like
NEK9	3349	2669	3142	2891	3038	3149	NIMA-related kinase 9
SAMM50	3109	3064	3000	2776	2664	3148	SAMM50 sorting and assembly machinery component
CHCHD3	2567	2985	2664	2829	2762	3145	coiled-coil-helix-coiled-coil-helix domain containing 2
IBTK	2385	2747	2638	2837	2783	3144	integrin-binding sialoprotein
LOC100549470	2642	1326	3239	1790	2089	3133	uncharacterized LOC100549463
LOC100545141	4091	2982	3620	2486	2996	3133	proteasomal ubiquitin receptor ADRM1-like
ARL6IP5	2571	2823	2756	2833	3099	3130	ADP-ribosylation factor-like 6 interacting protein 5
LOC104912963	3589	3401	3469	3392	3655	3130	72 kDa type IV collagenase-like
CCDC47	2873	3104	2733	2919	3279	3130	coiled-coil domain containing 43
PXMP4	3653	2940	3426	2793	3276	3128	peroxisomal membrane protein 4, 24kDa
CD151	3339	4093	3203	3502	2870	3125	CD109 molecule
NDUFA9							
	2720	2809	2914	2867	2912	3120	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 9, 39kDa
GNL3	3536	2532	3293	2531	2932	3120	guanine nucleotide binding protein-like 2 (nucleolar)
LOC100538629	3314	2832	3335	2825	2993	3117	liprin-alpha-2-like
GCN1L1	3296	2881	3262	2920	3128	3117	glial cells missing homolog 2 (Drosophila)
SSR3							signal sequence receptor, gamma (translocon-associated protein gamma)
	3403	2533	3270	2176	2542	3117	transformer 2 alpha homolog (Drosophila)
TRA2A	3392	2797	3185	2955	3132	3115	GrpE-like 1, mitochondrial (E. coli)
GRPEL2	3510	2944	3186	2708	3384	3115	adaptor-related protein complex 2, alpha 2 subunit
AP2A2	3447	2913	3291	2907	2892	3111	AFG3-like AAA ATPase 2
AFG3L2	3048	3056	3117	2967	3014	3109	ciliogenesis associated TTC17 interacting protein
CAV1	3817	3898	3493	3609	3516	3108	tubulin, beta 6 class V
TUBB6	5042	2997	4101	2747	3088	3100	ribonuclease/angiogenin inhibitor 1
RNH1	3829	2536	3660	2682	3275	3100	tubulin alpha-1A chain-like
LOC104916671	4038	2367	3437	2169	2862	3099	chromosome 3 open reading frame, human C6orf52
C3H6orf62	3371	2868	3190	2975	3191	3094	protein kinase, cGMP-dependent, type I
PRKG1	3475	3289	2946	2692	3814	3093	complexin 4
CPM	3077	3043	3086	2897	3457	3090	platelet/endothelial cell adhesion molecule 1
PECAM1	3592	3371	3628	3426	3275	3088	TAR DNA binding protein
TARDBP	3552	2625	3284	2835	3263	3087	serine/arginine-rich splicing factor 10
SRSF10	3713	2949	3476	2918	3054	3084	ATPase, class VI, type 11B
ATP11B	2812	2705	2704	3213	2918	3081	cathepsin Z
CTTN	3578	2847	3521	2813	3212	3079	schlafen family member 13-like
LOC100548827	4193	2808	3655	2457	2774	3077	small muscle protein, X-linked
SMPX	2522	3403	2358	2815	2307	3075	uncharacterized LOC100549361
LOC100549369	3119	2343	3050	2741	3118	3071	
B4GALT2							
	4270	3211	3763	3258	3467	3067	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 2
NDUFB6							
	3366	3628	3243	3200	3359	3065	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 6, 17kDa
GNS							
	3255	2855	3066	3073	2931	3064	N-acetylglucosamine-1-phosphate transferase, gamma subunit
SNRNP200	3604	2927	3376	3174	2921	3064	small nuclear ribonucleoprotein 200kDa (U5)
LOC100550170	3463	2740	3206	2644	3210	3062	putative maltase-glucoamylase-like protein FUJ16351
RRP12	3698	2589	3434	2719	3524	3058	ribosomal RNA processing 12 homolog (S. cerevisiae)
SNX1	3274	2665	3377	2873	3014	3058	sorting nexin 1
PPP2CA	3604	3165	3379	2810	3057	3055	protein phosphatase 2, catalytic subunit, alpha isozyme
LOC104909823	2932	2760	3103	2839	2981	3054	WD40 repeat-containing protein SMU1-like
PSME3							
	3276	2435	2951	2491	2845	3053	proteasome (prosome, macropain) activator subunit 3 (PA28 gamma; Ki)

ANGEL1	3342	2784	3272	3130	3487	3045	angel homolog 1 (Drosophila)
EDF1	3183	2932	3208	2831	2920	3042	ER degradation enhancer, mannosidase alpha-like 3
XPO5	3460	2690	3199	2864	2940	3042	exportin 5
FEM1A	3049	2828	3068	3260	3406	3040	ferrochelatase
MFN1	3333	2751	3131	2669	2878	3036	mitofusin 1
OLFML2A	3343	3236	3149	3006	2793	3036	olfactomedin-like 2A
VASH2	5483	3129	4912	3393	3807	3035	vasohibin 2
SRFBP1	2862	3216	3426	2379	2177	3031	serum response factor binding protein 1
PMPCB	3012	2820	2956	2727	2733	3030	peptidase (mitochondrial processing) beta
KTN1	2883	2822	2928	3371	2883	3027	kinase suppressor of ras 2
PABPC4	2470	3522	3102	3972	2800	3020	poly(A) binding protein, cytoplasmic 4 (inducible form)
AARS	3130	2867	3248	2864	2761	3018	alanyl-tRNA synthetase
PDHA1	3112	2948	3005	2702	2774	3016	pyruvate dehydrogenase (lipoamide) alpha 1
LOC104912053	4286	2697	3971	2687	2810	3015	marker of proliferation Ki-67
LOC104913281	2638	4408	2936	2853	2292	3008	uncharacterized LOC104913281
FKBP4	3716	2567	3282	2651	3340	3008	FK506 binding protein 3, 25kDa
ERGIC1	3176	2764	2909	2800	3044	3006	v-ets avian erythroblastosis virus E26 oncogene homolog
RPIA	3263	2882	3377	2429	2575	3001	ribose 5-phosphate isomerase A
NCKAP1	3539	2753	3280	2720	2816	2997	NCK-associated protein 1
MFN2	3569	2772	3111	2854	3747	2997	mitofusin 2
MAP2K1	3601	2697	3174	2482	3050	2994	mitogen-activated protein kinase kinase 1
HOMER3	3547	2385	3422	3124	4040	2991	homer homolog 2 (Drosophila)
PARP1	3848	2594	3432	2501	2827	2990	poly (ADP-ribose) polymerase 1
SYNE2	3141	4803	3028	4750	2772	2988	spectrin repeat containing, nuclear envelope 2
LOC100544619	3153	2441	3095	2886	2791	2987	protein BEAN1-like
UBXN4	3292	2617	3157	2867	2727	2986	UBX domain protein 4
SBD5	2984	2671	2985	2699	2892	2982	Shwachman-Bodian-Diamond syndrome
USP10	3593	2832	3029	2723	3190	2982	ubiquitin specific peptidase 10
LOC104912336	3662	2914	3299	2614	3151	2981	protein PRRC2C-like
TSN	3255	2792	3217	2584	2931	2977	translin
NET1	2591	2371	2872	2259	2644	2976	neuroepithelial cell transforming 1
GPM6B	3133	2895	3258	2932	2885	2975	glycosylphosphatidylinositol specific phospholipase D1
PGAM5	3176	2608	3075	2616	3232	2973	phosphoglycerate mutase family member 5
PPA1	2882	2774	2941	2708	2953	2971	pyrophosphatase (inorganic) 1
VGLL2	2949	3432	3019	3137	2483	2971	vestigial-like family member 2
HIGD1A	2852	2211	2551	2147	2930	2965	hypoxia inducible factor 1, alpha subunit inhibitor
COP58	2987	2643	2972	2508	2833	2960	COP9 signalosome subunit 7B
EI24	3381	2851	2923	2809	2794	2958	euchromatic histone-lysine N-methyltransferase 1
SNRNP35	2585	3499	2613	3404	2640	2958	small nuclear ribonucleoprotein 35kDa (U11/U12)
LBR	3623	2452	3502	2365	2787	2958	limb bud and heart development
RCC2	3466	2508	3193	2661	3029	2956	regulator of chromosome condensation 2
PES1	3300	2617	3133	2769	2940	2954	pescadillo ribosomal biogenesis factor 1
LOC104913953	1901	3749	2233	3372	3080	2953	smoothelin-like protein 2
LOC100547453	3438	3105	3329	3058	2973	2950	DNA excision repair protein ERCC-6-like 2
MTDH	3051	2712	3081	2982	2905	2949	metadherin
LOC100538580	2702	1594	3113	1945	2072	2941	protein eyes shut homolog
NPEPP5	3291	2748	3063	3360	3271	2940	aminopeptidase puromycin sensitive
AHSA1	3880	2689	3405	2556	3336	2938	AHA1, activator of heat shock 90kDa protein ATPase homolog 1 (yeast)
NT5DC2	3828	3809	3371	3297	2540	2934	5'-nucleotidase domain containing 2
DAP3	2979	3291	2791	2994	2567	2923	death-associated protein
ACADS	2403	2469	2312	2340	2443	2920	acyl-CoA dehydrogenase, C-2 to C-3 short chain
ANKRD17	3277	2698	2675	2850	2846	2915	ankyrin repeat domain 17
XIAP	1880	2507	2104	2824	3144	2910	X-linked inhibitor of apoptosis, E3 ubiquitin protein ligase
LOC100549535	3532	2724	3384	2765	2814	2905	ankyrin repeat and KH domain-containing protein 1
TMED10	3589	2878	3351	2752	2842	2904	transmembrane emp24-like trafficking protein 10 (yeast)
LOC723978	2240	2734	2636	2342	2090	2901	cytochrome c oxidase subunit VIc precursor
SMG1	2892	2745	2799	2965	2904	2895	SMG1 phosphatidylinositol 3-kinase-related kinase
BAG3	3425	2843	3053	2999	2770	2895	BCL2-associated athanogene 3
COPB1	3544	2723	3359	2730	2721	2891	coatamer protein complex, subunit alpha
LOC100550520	2820	2219	3090	2894	2239	2889	transitional endoplasmic reticulum ATPase-like
RAP1A	3064	2874	3078	2772	2826	2888	RAP1A, member of RAS oncogene family
ILK	3337	3050	3343	2926	3288	2887	interleukin enhancer binding factor 3, 90kDa
S100A10	3576	3636	3219	2454	2951	2887	S100 calcium binding protein A10
MRPL3	2930	2529	2862	2402	2537	2886	mitochondrial ribosomal protein L3
DYNLL2	3102	2833	2833	2386	2652	2884	dynein, light chain, LC8-type 1
TMEM59	3066	2897	2990	2822	2816	2883	transmembrane protein 59
SERINC3	3207	2681	3001	2594	2867	2882	serine incorporator 3
PDHX	2757	2221	2645	2179	2493	2882	pyruvate dehydrogenase complex, component X
PA2G4	4203	2569	3522	2758	2851	2879	proliferation-associated 2G4, 38kDa
CACNG5	2590	2493	2613	2637	2283	2875	calcium channel, voltage-dependent, gamma subunit 4
OARD1	2885	2638	2955	2435	3038	2874	O-acyl-ADP-ribose deacylase 1
C1H21orf33	2651	2521	2793	2799	2820	2871	chromosome 1 open reading frame, human C21orf140
MAT2B	3001	2592	2865	2587	2992	2871	methionine adenosyltransferase II, beta
TAGLN2	3250	3119	2897	2763	2917	2869	transgelin 2
ATIC	3062	2721	3521	3231	2993	2868	5-aminoimidazole-4-carboxamide ribonucleotide formyltransferase/IMP cyclohydrolase
DUSP10	2411	3591	2525	3663	2338	2865	dual specificity phosphatase 1
KMT2C	2544	2701	2465	3532	2982	2862	lysine (K)-specific methyltransferase 2A

USPL1	2988	2399	2840	2739	2776	2860	ubiquitin specific peptidase like 1
U2AF1	3388	2694	3264	2324	2559	2859	U2 small nuclear RNA auxiliary factor 1
LOC104914452	3646	3950	3170	3334	3576	2857	protein phosphatase 1 regulatory subunit 12B
TSPAN4	3205	2744	2899	2708	2543	2855	tetraspanin 4
ABI3BP	1912	3472	2532	5087	1940	2855	ABI family, member 3 (NESH) binding protein
ABCF3	2914	3090	2759	2922	3079	2854	ATP-binding cassette, sub-family F (GCN20), member 3
TEKT1	2340	3300	2320	2968	3593	2854	tektin 1
ABLM2	2156	2420	2101	2470	1686	2853	actin binding LIM protein family, member 2
MAP4	3185	2908	2775	3223	2583	2852	microtubule-associated protein 4
MAGT1	2917	2592	2786	2660	2793	2851	magnesium transporter 1
GLUD1	3173	2859	2885	2741	2472	2851	GLTSCR1-like
THOC2	2977	2588	2879	2835	2799	2848	THO complex 2
PCYT1A	3080	2327	2775	2391	2775	2846	phosphate cytidylyltransferase 1, choline, alpha
CDC25B	4684	3228	3693	2879	3616	2845	cell division cycle 25A
NUDC	3915	2719	3612	2547	3178	2838	nudC nuclear distribution protein
HIBCH	2715	2558	2735	2609	2931	2837	3-hydroxyisobutyrate dehydrogenase
CHMP7	2690	2681	2711	2690	2935	2837	charged multivesicular body protein 6
CTDSP1							CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) small phosphatase 1
PITX3	2678	3724	2972	3647	2667	2837	
NSD1	4028	3127	3165	2446	2812	2836	paired-like homeodomain 3
PRPF39	3177	2944	2840	3003	2938	2834	nuclear receptor binding SET domain protein 1
MRPL37	3256	2537	2815	2440	2560	2832	pre-mRNA processing factor 39
FNDC1	2713	3009	2748	2826	2568	2830	mitochondrial ribosomal protein L37
UBE2I	3273	3313	4154	2847	4311	2828	formin binding protein 4
PXN	3231	2574	3095	2533	2787	2826	ubiquitin-conjugating enzyme E2I
FZD9	3257	2889	3051	3052	3456	2814	paxillin
GABPA	2826	3294	2623	2750	3246	2809	frizzled class receptor 8
MBNL1	2947	2573	2938	2667	2623	2808	GABA(A) receptor-associated protein-like 2
CCDC50	3521	2489	3255	2789	3303	2805	muscleblind-like splicing regulator 1
ATPSJ2	3115	2383	2818	2775	2691	2803	coiled-coil domain containing 47
EIF1B	2648	3139	2650	2579	2682	2803	ATP synthase, H+ transporting, mitochondrial Fo complex, subunit F2
SEC13	2818	2731	2987	2780	2971	2801	eukaryotic translation initiation factor 1A, X-linked
DUSP28	3232	2624	2932	2336	2561	2797	SEC13 homolog (S. cerevisiae)
LOC100549101	2462	2688	2581	2560	2792	2795	dual specificity phosphatase 27 (putative)
TNFRSF11B	3177	2645	3399	2615	3148	2795	proton myo-inositol cotransporter-like
PHYHD1	2672	2721	2854	3136	2868	2795	tumor necrosis factor receptor superfamily, member 11b
USP13	2081	2352	2128	2395	1905	2795	phytanoyl-CoA dioxygenase domain containing 1
CXCL12	2011	2301	2255	2983	2610	2793	ubiquitin specific peptidase 13 (isopeptidase T-3)
NUMA1	3696	2662	3415	2372	3075	2791	coxsackie virus and adenovirus receptor
PFDN5	2841	2912	2931	3174	2874	2788	nuclear mitotic apparatus protein 1
PTK7	3060	2639	2893	2349	2853	2784	prefoldin subunit 5
DNAJC10	3784	2895	3088	2616	2701	2784	protein tyrosine kinase 7
MAN2A2	3208	2818	3129	2730	2812	2784	DnaJ (Hsp40) homolog, subfamily C, member 1
TPPP3	2856	3158	2810	3354	3558	2781	mannosidase, alpha, class 2A, member 2
ST13	938	2994	1286	1851	2122	2780	tubulin polymerization-promoting protein family member 3
							suppression of tumorigenicity 13 (colon carcinoma) (Hsp70 interacting protein)
ZC3H15	3103	2410	3033	2578	2647	2777	
SDPR	3177	2839	3090	2836	2978	2777	zinc finger CCHC-type containing 15
PARK7	3071	3660	2884	3209	3115	2775	serum deprivation response
RCSO1	2817	3046	2734	2560	2622	2771	parkinson protein 7
SH3GLB1	2227	2525	2367	2610	2642	2769	RCSO domain containing 1
RPS27L	3026	2669	2990	2913	2695	2769	SH3-domain GRB2-like endophilin B1
PUM2	2507	2850	2848	3043	3307	2767	ribosomal protein S27-like
MEGF10	2977	2687	2931	2838	2790	2767	pumilio RNA-binding family member 2
ETNPPL	1825	1958	2522	2885	2092	2766	multiple EGF-like-domains 10
COPG1	1414	2878	1955	2808	1842	2766	ethanolamine kinase 2
CRELD1	3128	2434	3009	2387	2675	2766	coatamer protein complex, subunit epsilon
LOC104912556	2634	3944	2510	3002	3040	2764	cellular repressor of E1A-stimulated genes 2
PDK1	2641	2790	2691	2781	2625	2763	E3 ubiquitin-protein ligase TRIP12-like
SMARCD3	2756	2186	2915	2979	2473	2762	pyruvate dehydrogenase kinase, isozyme 1
							SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 3
THOP1	2569	2699	2620	2780	2405	2759	
MCRS1	2892	2378	2794	2537	2826	2759	thimet oligopeptidase 1
IST1	3053	3038	2867	2656	2767	2758	microspherule protein 1
KREMEN1	2509	2627	2541	2500	2495	2757	isoprenoid synthase domain containing
LEPROT	4234	2727	3356	2354	2352	2756	KRAB-A domain containing 1
STT3B	3068	2321	2810	2325	2712	2753	leprecan-like 2
PMP22	3457	2801	3230	2561	2794	2752	STT3B, subunit of the oligosaccharyltransferase complex (catalytic)
KIF24	2661	3095	2583	2885	2494	2751	peripheral myelin protein 22
PTCD3	1712	1923	2054	2439	2186	2747	kinesin family member 23
POLDIP2	2421	2283	2308	2280	2200	2745	pentatricopeptide repeat domain 3
MAPK1	2892	2492	2826	2487	2425	2745	polymerase (DNA-directed), delta interacting protein 2
POMP	3121	2553	2993	2769	2920	2742	mitogen-activated protein kinase 1
SNRPC	3086	2750	3100	2433	2637	2741	proteasome maturation protein
TMED2	2845	2602	2799	2283	2559	2737	small nuclear ribonucleoprotein polypeptide C
ABCA1	3093	2713	2876	2647	2703	2736	transmembrane emp24 domain trafficking protein 2
	2303	2409	2562	3017	3549	2734	ATP-binding cassette, sub-family A (ABC1), member 1

TXNRD3	2969	2378	2771	2294	2484	2731	thioredoxin reductase 3
LASP1	3086	2794	2761	2364	2649	2727	leucyl-tRNA synthetase 2, mitochondrial
PUF60	2927	2579	2742	2283	2447	2724	poly-U binding splicing factor 60KDa
RAP1GDS1	3662	2586	3347	2462	2872	2720	RAP1, GTP-GDP dissociation stimulator 1
LARS	2772	2327	2635	2462	2433	2715	La ribonucleoprotein domain family, member 7
FAM198B	2807	2495	2652	2400	2578	2715	family with sequence similarity 198, member A
TXN	2850	2145	2782	2066	2480	2713	thioredoxin
PLEKHO1	3017	2516	2878	2485	2980	2711	pleckstrin homology domain containing, family O member 1
CLASP2	2959	2546	2901	2955	2911	2711	cytoplasmic linker associated protein 1
KLHDC2	2223	2639	2393	2595	2454	2710	kelch domain containing 10
FLNB	3282	2683	2987	2675	2872	2709	flightless I homolog (Drosophila)
IGFBP7	2722	3098	2749	2906	2944	2709	insulin-like growth factor binding protein 5
NF2	3296	2842	3155	2762	3236	2709	neurofibromin 2 (merlin)
NFAT5	3171	2567	2866	2639	2907	2707	nuclear factor of activated T-cells 5, tonicity-responsive
LOC104914787	2446	2162	2739	2154	2080	2700	transitional endoplasmic reticulum ATPase-like
THYN1	2788	2924	2812	2610	2505	2700	thymocyte nuclear protein 1
LOC100539663	1272	2431	1597	2530	2447	2696	sterile alpha motif domain-containing protein 9-like
FBLN2	2501	3188	2531	3204	2532	2696	filamin binding LIM protein 1
PNISR	2721	2500	2537	2673	2500	2695	PNN-interacting serine/arginine-rich protein
EXTL3	3166	2498	2745	2292	2857	2695	exostosin-like glycosyltransferase 2
WDR77	3182	2417	2774	2232	2567	2690	WD repeat domain 77
SEPT9	2981	2662	2929	2516	3053	2690	septin 9
LOC104914461	2950	2866	2842	2591	2503	2689	mitogen-activated protein kinase 14-like
DNAJA3	2606	2455	2511	2609	2531	2689	DnaJ (Hsp40) homolog, subfamily A, member 2
LOC100551072	6201	1213	3362	3249	6289	2688	hemoglobin subunit alpha-D
CHTOP							
	2802	2399	2680	2245	2471	2687	CTF8, chromosome transmission fidelity factor 8 homolog (S. cerevisiae)
XBP1	2599	2158	2679	1816	2240	2687	X-box binding protein 1
LOC100546986	3194	3150	3182	3650	2720	2683	solute carrier family 17 member 9-like
MAP2K6	2087	2467	1917	2210	2824	2678	mitogen-activated protein kinase kinase 6
LOC100543527	2686	2205	2672	2312	2777	2676	kynureninase
ACOT9	2639	2390	2608	2554	2486	2675	acyl-CoA thioesterase 9
HBS1L	2803	2458	2754	2516	2699	2675	heparin-binding EGF-like growth factor
DNAJB4	2557	3411	2398	2786	2666	2672	DnaJ (Hsp40) homolog, subfamily B, member 2
LOC104911094	2550	2598	2576	2361	2478	2672	RNA polymerase-associated protein RTF1 homolog
TUBAL3	2079	1264	2345	1544	1865	2671	tubulin, alpha-like 3
ATP1B3	3220	2524	3097	2485	2800	2666	ATPase, Na ⁺ /K ⁺ transporting, beta 3 polypeptide
GSTA4	2141	2766	2361	2383	2024	2666	glutathione S-transferase
DUSP8	2512	2918	2546	3237	2200	2666	dual specificity phosphatase 7
LOC104915527	2434	3290	2350	3470	3818	2665	myosin-8-like
CHURC1	2589	3275	2526	2877	2801	2660	conserved helix-loop-helix ubiquitous kinase
ATP1B4	1418	2823	1983	3311	3368	2658	ATPase, Na ⁺ /K ⁺ transporting, beta 4 polypeptide
BVES	2989	2520	2854	2795	2760	2657	BUD31 homolog (S. cerevisiae)
KNOP1	3012	2590	2879	2811	2996	2656	kininogen 1
BDH1	2441	2190	2415	2108	2609	2655	3-hydroxybutyrate dehydrogenase, type 1
MTX2	2784	2449	2871	2411	2729	2654	metaxin 2
MSRB3	2343	3128	2425	2519	2597	2653	methionine sulfoxide reductase B3
DNTTIP2	3342	2420	3171	2439	2987	2651	deoxynucleotidyltransferase, terminal, interacting protein 1
SVIL	2379	2751	2663	3198	2389	2648	supervillin
AP1M1	2800	2290	2674	2294	2435	2645	adaptor-related protein complex 1, mu 1 subunit
NRK	2765	2085	2893	2662	2426	2643	Nik related kinase
SYNGR2	2478	3269	2383	3085	2657	2642	synaptogyrin 2
NDUFB4							
	2498	2699	2517	2544	2896	2641	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 4, 15kDa
MAPK6	2847	2376	2760	2474	2793	2640	mitogen-activated protein kinase 6
MRPS7	2666	2413	2655	2337	2454	2635	mitochondrial ribosomal protein S7
RAB3IL1	3101	2438	2931	2480	2927	2635	RAB3A interacting protein (rabin3)-like 1
QARS	3033	2689	3008	2428	2724	2634	glutamyl-tRNA synthetase
DHTKD1	2577	2652	2479	2501	2544	2632	dehydrogenase/reductase (SDR family) member 9
SCRN3	2452	2125	2614	2424	2456	2631	secernin 3
CDC42BPB	2982	2423	2851	2403	2470	2630	cell division cycle 42
MICU2	2569	2530	2612	2235	2303	2629	mitochondrial calcium uptake 2
MEF2C	2371	2635	2702	2529	2489	2629	myocyte enhancer factor 2C
AASS	1902	2486	2017	3074	2452	2627	aminoadipate-semialdehyde synthase
SBN01	2888	2496	2892	2578	2637	2624	strawberry notch homolog 1 (Drosophila)
UBE2D1	2329	2474	2321	2450	2463	2623	ubiquitin-conjugating enzyme E2D 1
FHOD1	1637	3047	2081	3273	2348	2620	four and a half LIM domains 5
HADH	2497	2656	2652	2567	2461	2618	2-hydroxyacyl-CoA lyase 1
SFPQ	3334	2492	3055	2485	2459	2617	splicing factor proline/glutamine-rich
BSG	2955	2688	2669	2553	2429	2617	BSD domain containing 1
NR2C2	2424	2725	2653	2877	2397	2616	nuclear receptor subfamily 2, group C, member 2
LRRC39	1722	2384	2022	2738	2836	2616	leucine rich repeat containing 39
ATPGV0A1	2564	2641	2510	2470	2839	2614	ATPase, H ⁺ transporting, lysosomal V0 subunit a1
MYLK4	1989	1341	2744	1900	3130	2614	myosin light chain kinase family, member 4
GSPT1	2840	2275	2647	2316	2546	2614	gelsolin
IKBKAP	3025	2205	2979	2120	2079	2613	IKKBK interacting protein
NOL9	2580	2505	2488	2117	2270	2611	nucleolar protein 9
LOC104914225	2418	2797	2519	2505	2599	2610	uncharacterized LOC104914225
STBD1	1859	2635	2028	2785	3508	2606	starch binding domain 1

PSMD4							
COP57A	3065	2733	2889	2475	2648	2604	proteasome (prosome, macropain) 26S subunit, non-ATPase, 4
SLTM	2663	2496	2554	2406	2417	2598	COP9 signalosome subunit 5
LOC104912248	2905	2378	2708	2462	2429	2598	SAFB-like, transcription modulator
FDP5	2682	3190	2802	2896	2456	2598	transforming growth factor beta receptor type 3-like
RBMX	2496	1216	3441	1814	2267	2598	farnesyl-diphosphate farnesyltransferase 1
SLIRP	3080	2528	2789	2294	2380	2596	RNA binding motif protein, X-linked
GRSF1	2743	2596	2695	2220	2517	2596	SRA stem-loop interacting RNA binding protein
OSBPL1A	2788	2310	2546	2380	2415	2595	gastrin-releasing peptide receptor
LOC104909293	2659	2497	2824	2434	2069	2593	oxysterol binding protein-like 1A
LOC100548711	2074	2161	2584	2461	2753	2593	eyes absent homolog 1
BTG2	2812	2305	2511	1978	2448	2587	calcium-binding protein 39
RAB8B	2356	2741	2368	2574	2444	2586	B-cell translocation gene 1, anti-proliferative
LSP1	2662	2353	2706	2446	2550	2586	RAB8B, member RAS oncogene family
CTNNA1	2793	2078	2420	2202	2316	2585	lymphocyte-specific protein 1
RNF20	3249	2411	3046	2522	2544	2585	cytotoxic T-lymphocyte-associated protein 4
CCL13	2381	2321	2632	2271	2006	2584	ring finger protein 20, E3 ubiquitin protein ligase
EIF4E	1867	2939	2156	2727	2502	2581	chemokine (C-C motif) ligand 1
LTBP2	2860	2391	2825	2410	2484	2581	eukaryotic translation initiation factor 4B
VAPB	3771	3283	3176	2962	2994	2580	latent transforming growth factor beta binding protein 2
SEC24A	2860	2896	2926	2724	2392	2578	VAMP (vesicle-associated membrane protein)-associated protein B and C
NPLOC4	3113	2844	2902	2826	2742	2577	SEC24 family member A
KLF5	2720	2317	2737	2461	2501	2575	nuclear protein localization 4 homolog (S. cerevisiae)
CSH14orf2	2711	2200	2311	2020	1950	2575	Kruppel-like factor 4 (gut)
TPX2	2381	3765	2361	3214	2546	2574	chromosome 5 open reading frame, human C14orf180
LOC104916870	3328	2386	3256	2507	2467	2573	TPX2, microtubule-associated
USP1	1289	1910	1709	3606	3290	2570	glycogen phosphorylase, muscle form-like
LRRC17	3447	2444	3227	2144	2334	2570	ubiquitin specific peptidase 1
LOC104917167	2999	2241	2687	2652	3094	2567	leucine rich repeat containing 17
EIF3J	2567	3084	2241	2884	2647	2567	neuroblast differentiation-associated protein AHNK-like
ARPC2	2883	2529	2714	2547	2775	2566	eukaryotic translation initiation factor 3, subunit I
SEMA6D	3071	2258	2837	2088	2406	2565	actin related protein 2/3 complex, subunit 2, 34kDa
CRK							sema domain, transmembrane domain (TM), and cytoplasmic domain,
SCN4A	1614	2361	1982	3160	1977	2564	(semaphorin) 6D
PSMB1	2679	2396	2656	2394	2408	2563	cysteine-rich secretory protein LCCL domain containing 2
MCFD2	1814	2453	2036	2812	2391	2562	sodium channel, voltage-gated, type IV, alpha subunit
ARMC8	2829	2435	2830	2302	2355	2560	proteasome (prosome, macropain) subunit, beta type, 1
MTHFD1L	2702	2471	2686	2552	2775	2560	multiple coagulation factor deficiency 2
	2633	2322	2566	2339	2412	2559	armadillo repeat containing 8
	2391	2175	2486	2405	2049	2558	methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1-like
FAM32A	2590	2422	2474	2087	2534	2554	family with sequence similarity 26, member F
SREBF1	2895	1779	2374	2150	3352	2552	sterol regulatory element binding transcription factor 1
PPP2R2D	2435	2447	2314	2543	2478	2548	protein phosphatase 2, regulatory subunit B, delta
DKC1	3121	2557	2864	2548	2309	2546	DIX domain containing 1
OPTN	2412	1967	2431	2190	2849	2545	optineurin
COQ10B	1281	3018	1737	2755	2441	2541	coenzyme Q10 homolog A (S. cerevisiae)
RRM1	3387	2375	3003	1869	2001	2541	ribonucleotide reductase M1
MORF4L1	2751	2439	2675	2245	2508	2539	mortality factor 4 like 1
DAP	2547	2106	2728	2078	2281	2539	D-amino-acid oxidase
USO1	2892	2442	2757	2339	2514	2537	USO1 vesicle transport factor
CLU	3382	3027	3208	3331	2996	2537	clathrin, heavy chain-like 1
TNIP1	2498	2944	2333	2737	2726	2534	TNFAIP3 interacting protein 1
C1H12orf73	2619	2640	2626	2325	2687	2531	chromosome 1 open reading frame, human C12orf66
UBE2A	2637	2619	2564	2591	2583	2528	ubiquitin-conjugating enzyme E2A
RAB11A	2691	2487	2563	2193	2239	2525	RAB11A, member RAS oncogene family
DIAPH2	2677	2382	2584	2359	2304	2525	diablo, IAP-binding mitochondrial protein
PEAK1	2886	2757	2763	2569	2731	2524	pseudopodium-enriched atypical kinase 1
TFAM	2980	2528	2757	2203	2333	2523	transcription factor A, mitochondrial
NDUFV3	2363	2793	2478	2845	2472	2521	NADH dehydrogenase (ubiquinone) flavoprotein 3, 10kDa
ADIPOR2	2181	2109	2219	2340	2367	2517	adiponectin receptor 2
PRCP	2821	1938	2555	2110	2306	2513	prolylcarboxypeptidase (angiotensinase C)
CWC15	2661	2572	2582	2323	2329	2512	CUB and zona pellucida-like domains 1
TGFB1	2332	3577	3571	2319	2018	2511	transforming growth factor, beta-induced, 68kDa
CDH5	2649	2433	2681	2730	2540	2510	cadherin-related 23
GOLGA2	2555	2337	2671	2318	2462	2509	golgin A1
SEC31A	3060	2210	2781	2199	2499	2508	SEC31 homolog A (S. cerevisiae)
EDA2R	4552	3544	3614	3077	2626	2506	ectodysplasin A
PDCL	2635	2239	2568	2336	2387	2503	phosducin-like
KIAA2013	3051	2354	2801	2283	2826	2503	KIAA1919 ortholog
ARHGAP17	3120	3103	2792	2597	2589	2502	Rho GTPase activating protein 17
ENTPD6	1991	2299	1866	2132	2344	2502	ectonucleoside triphosphate diphosphohydrolase 5
PTPRN	2744	2962	2674	2792	2828	2500	protein tyrosine phosphatase, receptor type, N
ESYT2	2251	2462	2319	2211	2227	2500	estrogen-related receptor gamma
ASH1L	2780	2581	2575	2746	2571	2499	ash1 (absent, small, or homeotic)-like (Drosophila)
CORO6	2769	2882	2534	2849	2841	2498	coronin, actin binding protein, 2B
LOC104911667							ras-associated and pleckstrin homology domains-containing protein 1-
	2885	2234	2927	2142	2469	2497	like

ANKRD50	2474	2085	2561	2446	2263	2497	ankyrin repeat domain 50
ARPC5	2852	2354	2643	2086	2392	2495	actin related protein 2/3 complex, subunit 5, 16kDa
NDUFA8							
	2297	2697	2339	2372	2559	2495	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 8, 19kDa
ACTR3B	2070	2165	2171	2405	3245	2494	ARP3 actin-related protein 3 homolog B (yeast)
KPNA2	3082	1968	2995	2120	2366	2493	kinetochore associated 1
YWHAH							tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation
	3169	2728	2978	2454	2484	2491	protein, eta
DAZAP1	3003	2186	2592	2285	2636	2488	dynein assembly factor with WDR repeat domains 1
MYBL2	2627	2028	2631	2227	1993	2487	v-myb avian myeloblastosis viral oncogene homolog-like 2
LOC100548591	2667	2053	2809	2468	2679	2486	cysteine-rich venom protein-like
ENOPH1	2599	2293	2469	2189	2356	2484	enolase family member 4
PYCR1	2424	1975	2812	1288	1842	2483	pyrroline-5-carboxylate reductase 1
LOC104916804	2013	2323	1855	2467	1920	2481	zinc finger protein 638
C4H4orf29	2230	2151	2229	2265	2171	2481	chromosome 4 open reading frame, human C4orf27
RANBP3	2780	2233	2509	2094	2752	2480	RAN binding protein 3
PRDX6	2554	2533	2450	2378	2718	2480	peroxiredoxin 6
LOC100542161	2708	2612	2565	2307	2230	2480	ubiquitin carboxyl-terminal hydrolase 35
SHF	3590	2867	3111	2369	2637	2478	Src homology 2 domain containing F
LOC100551269	2977	2451	2779	2451	2532	2477	tyrosine-protein kinase JAK1-like
SSRP1	3553	2433	3101	2177	2319	2477	structure specific recognition protein 1
LOC100550740	2327	2508	2325	2283	2036	2474	putative fatty acid-binding protein 5-like protein 3
AGPS	2142	2196	2186	2448	2292	2474	alkylglycerone phosphate synthase
RGS2	1168	2197	1583	2603	1347	2472	regulator of G-protein signaling 2
UBE3A	2504	2413	2521	2626	2446	2468	ubiquitin protein ligase E3A
MAPKAPK2							
	2926	2705	2720	2582	3003	2464	mitogen-activated protein kinase-activated protein kinase 2
DCTN3	2344	2303	2567	2040	1915	2463	dCMP deaminase
DLAT	2367	2056	2332	2034	2109	2462	dickkopf WNT signaling pathway inhibitor 3
MAK16	2623	2269	2521	2330	2272	2462	MAK16 homolog (S. cerevisiae)
LOC104909648	2430	2176	2592	2333	2558	2462	uncharacterized LOC104909648
DNM1L	2484	2128	2419	2222	2317	2461	dynamins 1
RAB3GAP2	2645	2476	2524	2418	2537	2460	RAB3 GTPase activating protein subunit 2 (non-catalytic)
COPE	2731	2490	2738	2103	2229	2459	coatamer protein complex, subunit beta 2 (beta prime)
SSB	3207	2032	2892	2146	2505	2456	Sjogren syndrome antigen B (autoantigen La)
GTPBP4	2482	2389	2437	2464	2161	2455	GTP binding protein 3 (mitochondrial)
PREP	2053	1704	2307	2038	2393	2454	prolyl endopeptidase
ERP29	3142	1901	2587	1940	2362	2452	endoplasmic reticulum protein 27
CEP85	1992	2642	2050	2944	2340	2451	centrosomal protein 83kDa
TRAM1	2719	2311	2763	2212	2058	2451	translocation associated membrane protein 1
RASSF3	2828	2063	2667	2152	2600	2451	Ras association (RalGDS/AF-6) domain family member 3
MBNL3	2840	2184	2613	2219	2399	2451	muscleblind-like splicing regulator 3
CUL3	2852	2770	2795	2743	2592	2450	cullin 1
ECHS1	2146	2918	2025	2287	2119	2450	enoyl CoA hydratase domain containing 3
CKMT2	687	2089	1310	2561	3857	2449	chemokine-like factor
RSL24D1	2242	2124	2362	1979	2273	2446	ribosomal L24 domain containing 1
STK25	2692	2382	2388	2320	2263	2443	serine/threonine kinase 25
UBE4A	2274	2222	2298	2366	2267	2441	ubiquitination factor E4A
LOC100542519	2380	2595	2662	2163	2345	2441	toll-like receptor 2
MAP7D3	2524	2313	2348	2256	2318	2440	MAP7 domain containing 3
ATP6V1D	2221	2269	2270	2187	2321	2440	ATPase, H+ transporting, lysosomal 34kDa, V1 subunit D
DHX15	2997	2376	2710	2397	2467	2439	dehydrogenase E1 and transketolase domain containing 1
TPR	2818	2234	2508	2281	2369	2438	translocated promoter region, nuclear basket protein
CUL1	2627	2333	2595	2405	2440	2436	CUE domain containing 2
SMC3	2818	2605	2744	2422	2199	2436	structural maintenance of chromosomes 3
EPN2							
	3186	2433	2955	2546	2893	2435	epilepsy, progressive myoclonus type 2A, Lafora disease (laforin)
TMEM70	2166	1920	2245	2157	2327	2434	transmembrane protein 70
U2SURP	2440	2293	2365	2217	2194	2433	U2 snRNP-associated SURP domain containing
RAB12	2039	2300	2269	2491	2490	2432	RAB12, member RAS oncogene family
QRICH1	2439	2633	2411	2596	2509	2431	glutamine-rich 1
SEPT8	1774	1806	1879	2313	1952	2428	septin 8
GBF1	2848	2327	2531	2201	2458	2428	glioblastoma amplified sequence
PAPOLA	2832	2077	2658	2315	2439	2428	poly(A) polymerase alpha
BLOC1S5							
	1990	2303	1770	2361	1909	2427	biogenesis of lysosomal organelles complex-1, subunit 5, muted
CYGB	2772	2161	2960	2110	2849	2417	cytoplasmic FMR1 interacting protein 2
RALBP1	2624	2138	2447	2213	2437	2417	ralA binding protein 1
PLRG1	2216	2169	2430	2087	2138	2416	pleiotropic regulator 1
PTPRG	2609	2108	2490	2111	2412	2413	protein tyrosine phosphatase, receptor type, G
SRP54	2566	2186	2523	2153	2268	2411	signal recognition particle 54kDa
MRPS15	2413	2325	2281	1961	2233	2409	mitochondrial ribosomal protein S15
ACTA2	2998	2836	2697	2534	3253	2402	actin, alpha 2, smooth muscle, aorta
PNN	2648	2197	2479	2134	2162	2400	pinin, desmosome associated protein
CDK1	2969	2150	2985	2098	2115	2400	cell death-inducing p53 target 1
ESD							
	1931	2434	2144	2778	2238	2399	establishment of sister chromatid cohesion N-acetyltransferase 2
DBI							
	2441	2460	2559	2153	2164	2399	dopamine beta-hydroxylase (dopamine beta-monooxygenase)

VDAC3	2378	2315	2363	2237	2420	2397	voltage-dependent anion channel 3
VPS4A	2825	2458	2663	2419	2539	2397	vacuolar protein sorting 4 homolog A (S. cerevisiae)
LOC104917029	1429	2230	1804	2505	2685	2397	troponin T, slow skeletal muscle-like
AIMP2							aminoacyl tRNA synthetase complex-interacting multifunctional protein 2
	2543	2111	2513	2112	2654	2396	
GNMT	2614	2516	2544	2523	2477	2395	guanine nucleotide binding protein-like 3 (nucleolar)
PRNP	2785	2798	2504	2509	2558	2395	prion protein
IVD	1917	2488	1975	2347	2439	2394	intersectin 2
ARPC1A	2667	1798	2106	1853	2008	2393	actin related protein 2/3 complex, subunit 1A, 41kDa
KCTD20	1970	2540	2082	2505	2109	2392	potassium channel tetramerization domain containing 2
FBXL5	2008	2339	2096	2881	2510	2390	F-box and leucine-rich repeat protein 4
AKAP9	2581	2029	2596	2605	2450	2388	A kinase (PRKA) anchor protein 9
SUMO2	2826	2157	2765	2103	2378	2387	small ubiquitin-like modifier 2
YIPF5	2958	2166	2749	1786	2603	2386	Yip1 domain family, member 5
MDN1	2945	2045	2437	2296	2592	2385	MDN1, midasin homolog (yeast)
DCTN4	2383	2132	2379	2162	2225	2383	dynactin 3 (p22)
LOC100547530	2729	2366	2803	1883	2065	2383	vitamin D 25-hydroxylase
PNPLA2	2273	5660	2166	3039	2205	2382	patatin-like phospholipase domain containing 2
CCNB2	3075	2186	2761	2107	2073	2381	cyclin A2
LOC100544513	1580	1895	1639	2098	2067	2378	selenoprotein K
LOC104913821	2216	2383	2351	2580	2373	2376	uncharacterized LOC104913821
RAB18	2314	2227	2386	2305	2186	2374	RAB18, member RAS oncogene family
NCBP1	2340	1831	2302	1914	2078	2374	nuclear cap binding protein subunit 1, 80kDa
NMT1	2552	2263	2492	2253	2400	2373	N-myristoyltransferase 1
SCD	2192	707	2039	1169	2177	2373	stearoyl-CoA desaturase (delta-9-desaturase)
TRIOBP	2591	2614	2433	2518	2565	2372	TRIO and F-actin binding protein
PPP1CC	2456	2159	2408	1949	2509	2372	protein phosphatase 1, catalytic subunit, gamma isozyme
DCAF13	3083	2128	2926	2117	2318	2371	DDB1 and CUL4 associated factor 12
INTS2	1925	2142	1903	2042	1675	2371	integrator complex subunit 12
LOC104913356	2555	2822	2368	2926	2539	2369	adenylate cyclase type 9
PLEKHM2							pleckstrin homology domain containing, family M (with RUN domain)
	3529	2818	2972	2895	2731	2369	member 2
LOC104909252	2297	992	2826	1430	2421	2366	myosin-3-like
NDUFA12	2575	2694	2539	2397	2742	2365	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 12
TSC2	2362	2500	2372	2373	2297	2360	tuberous sclerosis 2
SF3A1	2655	2232	2488	2216	2217	2358	splicing factor 3a, subunit 1, 120kDa
PRKCQ	2587	2482	2419	2664	2426	2355	protein kinase C, theta
LOC100540462	2584	2150	2437	2015	2533	2353	cas scaffolding protein family member 4-like
KIAA0195	2557	2124	2282	2050	2125	2352	KIAA0141 ortholog
GLRX3	2254	2072	2197	2305	2097	2351	glutaredoxin 2
SGCB							
	1972	2135	2132	2458	2404	2350	sarcoglycan, beta (43kDa dystrophin-associated glycoprotein)
LIAS	1759	2033	1646	1841	1568	2346	LIM homeobox 9
NDUFB3							
	2100	2705	2099	2275	2295	2344	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 3, 12kDa
NOP2	3059	2295	2709	2224	2504	2342	NOP2 nucleolar protein
B2M	2736	2875	2527	2575	2719	2341	beta-2-microglobulin
GMFB	2636	2034	2218	1741	1847	2340	glucocorticoid modulatory element binding protein 2
ARL8B	2427	2340	2396	2297	2311	2340	ADP-ribosylation factor-like 8B
SLC25A20							
	2529	2417	2442	2441	2644	2339	solute carrier family 25 (carnitine/acylcarnitine translocase), member 20
FSD2	1288	2255	1533	2434	2003	2338	fibronectin type III and SPRY domain containing 1-like
NFS1	2043	2157	2081	2056	1902	2337	NFS1 cysteine desulfurase
PRSS35	2228	2077	2386	2478	2200	2336	protease, serine, 35
RIC8A	1770	2143	2121	2640	2130	2336	RIC8 guanine nucleotide exchange factor A
LOC104910106	1960	2209	2047	2326	2760	2335	uncharacterized LOC104910106
PDAP1	2507	2451	2374	2318	2249	2334	PDGFA associated protein 1
LOC100539484	1980	2478	1898	2085	1613	2334	uncharacterized LOC100539483
TRA2B	2390	2177	2479	1945	2034	2333	transformer 2 beta homolog (Drosophila)
ATP2B1	2156	2375	2322	2168	2239	2332	ATPase, Ca++ transporting, plasma membrane 1
LOC104915501	2590	2150	2555	1863	2238	2332	catenin alpha-1 pseudogene
USP47	2345	2428	2288	2504	2107	2332	ubiquitin specific peptidase 47
ALAS1	2704	2025	2466	1964	2221	2332	5'-aminolevulinate synthase 1
SOGA1	2730	2735	2538	2650	2256	2330	suppressor of glucose, autophagy associated 1
SLMO2	3014	2096	2678	1940	2418	2330	slowmo homolog 2 (Drosophila)
FAM46C	1300	2205	1767	2631	2566	2329	family with sequence similarity 46, member A
NEK6	2843	1938	2572	2028	2102	2326	NIMA-related kinase 6
NDIFP2	2300	2305	2442	2171	2142	2325	Nedd4 family interacting protein 2
TMEM57	2535	2478	2475	2668	2808	2325	transmembrane protein 57
KMT2E	2005	1908	2098	2423	2052	2324	lysine (K)-specific methyltransferase 2C
MRPS31	2430	2054	2623	1949	2030	2322	mitochondrial ribosomal protein S31
SEC61G	2430	2214	2577	1934	2298	2322	Sec61 gamma subunit
UBA3	2212	2125	2217	2151	2253	2322	ubiquitin-like modifier activating enzyme 3
WNK2	1811	1850	1751	2336	1752	2321	WNK lysine deficient protein kinase 2
MAP1A	2482	1814	2448	2044	1934	2320	microtubule-associated protein 1A
TMEM38B	2695	2145	2776	2403	2528	2320	transmembrane protein 38B
PCNP	2513	2160	2449	2073	2206	2315	PEST proteolytic signal containing nuclear protein
PRSS23	2435	2794	2490	2438	2033	2314	protease, serine, 23
LOC100540231	1568	1790	1959	2169	2078	2312	aryl-hydrocarbon-interacting protein-like 1

GXYLT2	2757	2476	2438	2431	2461	2311	glucoside xylosyltransferase 1
OGDH							
	2480	2679	2348	2616	2475	2311	oxoglutarate (alpha-ketoglutarate) dehydrogenase (lipoamide)
LOC100544708	3435	2280	3269	2076	2908	2310	glyoxylate reductase/hydroxypyruvate reductase-like
SGTA							
	2541	2124	2330	2014	2276	2308	small glutamine-rich tetratricopeptide repeat (TPR)-containing, alpha
LOC104909826	2237	2220	2266	2172	2297	2305	importin subunit alpha-6-like
LOC100540049	1343	2665	1425	3120	1382	2304	chromodomain-helicase-DNA-binding protein 1-like
YARS	2485	2024	2710	1722	2236	2304	tyrosyl-tRNA synthetase
TAB2	2211	1958	2335	2244	2229	2303	TGF-beta activated kinase 1/MAP3K7 binding protein 2
AIMP1							
	2643	2674	2348	2019	1815	2301	aminoacyl tRNA synthetase complex-interacting multifunctional protein 1
RUVBL1	2510	2143	2380	1949	1972	2298	RuvB-like AAA ATPase 1
NDUF88							
	2449	2286	2321	2036	2282	2296	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 8, 19kDa
PI4KA	2595	2112	2578	2187	2413	2296	phosphatidylinositol 4-kinase, catalytic, alpha
CDKN1B	2175	2298	2577	2649	2165	2295	cyclin-dependent kinase inhibitor 1A (p21, Cip1)
WDC1	2491	2263	2433	2271	2275	2293	WD and tetratricopeptide repeats 1
HEG1							
	2673	2320	2617	2047	2423	2292	HECT, C2 and WW domain containing E3 ubiquitin protein ligase 2
LOC100547098							
	2376	2734	2353	2376	2566	2290	dehydrogenase/reductase SDR family member on chromosome X-like
MKKS	2323	1963	2386	1970	2460	2286	McKusick-Kaufman syndrome
UBR5	2408	2232	2419	2207	2273	2285	ubiquitin protein ligase E3 component n-recognin 5
APOO	2227	2055	2392	2135	2293	2285	apolipoprotein O
LOC104909990	2386	2188	2294	2134	2272	2284	kinase D-interacting substrate of 220 kDa-like
ETFDH	2263	2344	2222	2531	2154	2284	electron-transfer-flavoprotein, alpha polypeptide
UBE2Q1	2528	2143	2365	2172	2332	2284	ubiquitin-conjugating enzyme E2Q family member 1
NUP155	2891	1913	2731	1911	1605	2284	nucleoporin 155kDa
RAD23B	2233	2230	2438	2205	2054	2283	RAD23 homolog B (S. cerevisiae)
USP28	2238	2071	2271	2521	2428	2283	ubiquitin specific peptidase 28
LOC100539112	2368	2454	2107	1717	1861	2281	galanin receptor type 2-like
CAMK1D	6101	4156	4745	3472	4331	2281	calcium/calmodulin-dependent protein kinase I
PRKCA	1892	2206	1898	2470	2280	2281	protein kinase C, alpha
TNRC6A	1941	1993	2054	2230	2158	2280	trinucleotide repeat containing 6A
SRP72	2611	2211	2489	2227	2070	2279	signal recognition particle 72kDa
TBX15	1895	2626	2272	2254	2367	2278	T-box 15
AP2B1	2569	2018	2395	2097	2086	2275	adaptor-related protein complex 2, beta 1 subunit
LRRFIP2	2733	2755	2497	2502	2221	2274	leucine rich repeat (in FLII) interacting protein 2
NPM3	2853	1891	2868	1996	2425	2274	nucleophosmin/nucleoplasm 3
LOC100544136	1862	1794	2111	2382	2283	2274	thrombospondin type-1 domain-containing protein 7A
OSTC	2559	1898	2447	1714	2134	2271	oligosaccharyltransferase complex subunit (non-catalytic)
ETFA	2070	2041	2091	2021	1948	2270	eukaryotic translation termination factor 1
TEF	2189	2720	2240	2350	2419	2269	thyrotrophic embryonic factor
LOC100547883	2873	2207	2470	2443	2014	2268	claudin-22-like
ZFAND6	2242	1844	2361	2009	2345	2266	zinc finger, AN1-type domain 6
TMEM263	2434	2170	2357	2077	2143	2265	transmembrane protein 263
PTPN11	2574	2062	2421	2013	2050	2263	protein tyrosine phosphatase, non-receptor type 11
LOC100548337	2348	2223	2314	2024	2285	2263	N(4)-(beta-N-acetylglucosaminy)-L-asparaginase-like
PCF11	2350	2241	2401	2340	2395	2262	PCF11 cleavage and polyadenylation factor subunit
JUND	2605	2560	2339	2264	2280	2262	jun proto-oncogene
TCEB1							
	2222	2138	2157	1939	2067	2261	transcription elongation factor B (SIII), polypeptide 1 (15kDa, elongin C)
IVNS1ABP	2155	2108	2241	2023	2107	2259	isovaleryl-CoA dehydrogenase
FAM98A	2243	1963	2470	2126	2248	2259	family with sequence similarity 96, member B
NARS	2360	2043	2232	1843	2102	2259	asparaginyl-tRNA synthetase
LOC104914174	2368	1667	2399	1882	2561	2258	uncharacterized LOC104914174
HYOU1	2631	1774	2366	1746	1906	2257	hydroletharus syndrome 1
FAM219A	2039	2153	2251	2563	1963	2257	family with sequence similarity 217, member B
UBE2J2	2528	2073	2459	1871	2131	2256	ubiquitin-conjugating enzyme E2, J2
PDLIM7	2592	2296	2318	2098	2442	2252	PDZ and LIM domain 7 (enigma)
SRSF2	2790	1966	2500	1980	2145	2251	serine/arginine-rich splicing factor 2
DHCR24	2186	1058	2337	1395	1741	2250	deoxyguanosine kinase
LOC104911367	2190	2697	2580	2458	2125	2250	supervillin-like
MKL2	2121	2096	2205	2370	2294	2249	MKL/myocardin-like 2
KAT2B	2226	2237	2179	2732	2631	2249	K(lysine) acetyltransferase 2A
MRPL9	2271	2543	2141	1934	2150	2247	mitochondrial ribosomal protein L9
CRIP1	2114	2107	2190	1957	2689	2246	cysteine rich transmembrane BMP regulator 1 (chordin-like)
SSR2							
	2637	2218	2383	1851	1953	2245	signal sequence receptor, beta (translocon-associated protein beta)
ANK2	1338	1863	1572	2089	1963	2243	ankyrin 2, neuronal
SETD2	2600	2311	2582	2600	2474	2243	SET domain containing 2
COL28A1	2592	2694	2321	2930	2972	2241	collagen, type XXVII, alpha 1
ANXA11	2250	2390	2325	2307	2585	2241	annexin A11
GNPAT	2346	1891	2399	1930	2180	2240	glycine N-methyltransferase
PSMD12							
	2488	1900	2523	2041	2076	2239	proteasome (prosome, macropain) 26S subunit, non-ATPase, 12
WDR43	2885	2199	2597	2023	2082	2239	WD repeat domain 43
IREB2	2292	2142	2225	2211	2193	2238	interleukin-1 receptor-associated kinase 4

RNF13	2383	2220	2275	2077	2033	2237	ring finger protein 13
HM13	2617	2236	2467	1960	2061	2235	hepatic leukemia factor
PKP4	1715	1748	2034	2127	1888	2234	plakophilin 4
CHRNA1	3250	1896	2807	1832	1656	2234	cholinergic receptor, muscarinic 5
IWS1	2394	2185	2213	2107	2130	2233	influenza virus NS1A binding protein
LOC100546173	2174	2407	2218	2085	2190	2231	dipeptidase 2-like
LOC100550954	1577	2407	1817	2458	1942	2230	frizzled-2
ISCU	2315	2032	2100	1952	2171	2230	iron-sulfur cluster assembly 2
SPIN1	1735	1837	2252	2023	1709	2229	spindlin 1
ACTR3	2763	2049	2712	1938	2257	2229	ARP3 actin-related protein 3 homolog (yeast)
SLMAP	2809	2844	2774	2522	2253	2228	sarcolemma associated protein
LMAN1	2565	1941	2478	1686	1923	2228	LLP homolog, long-term synaptic facilitation (Aplysia)
LOC100548043	2655	2117	2522	2426	2326	2228	gamma-aminobutyric acid type B receptor subunit 2
DLGAP4	2563	2067	2305	2075	2119	2223	discs, large (Drosophila) homolog-associated protein 3
FOXO3	1649	2496	1885	2553	1744	2223	forkhead box O1
CD47	2511	1940	2384	2034	2061	2222	CD46 molecule, complement regulatory protein
PPM1F	2563	2021	2474	2181	2425	2222	protein phosphatase, Mg2+/Mn2+ dependent, 1F
TEX2	2253	2029	2155	1970	1923	2220	testis expressed 2
CAMK2D	2215	2187	2112	2524	1985	2219	calcium/calmodulin-dependent protein kinase II beta
MFG8	2832	2287	2562	2455	2657	2216	milk fat globule-EGF factor 8 protein
FARS8	2639	2109	2363	2079	2321	2216	phenylalanyl-tRNA synthetase, alpha subunit
CDC42SE1	2612	2362	2303	2159	2330	2216	CDC42 effector protein (Rho GTPase binding) 4
PPP2CB	2616	2114	2303	1847	2050	2214	protein phosphatase 2, catalytic subunit, beta isozyme
LOC100546622	2327	1917	2244	1848	1922	2213	cohesin subunit SA-2-like
NFE2L2	2294	2009	2166	2077	2263	2212	nuclear factor, erythroid 2-like 2
PARG	2496	1958	2412	2161	2248	2207	poly (ADP-ribose) glycohydrolase
ABI2	2410	2140	2410	2117	1933	2207	abl-interactor 2
LOC100540821	2496	2122	2370	1983	2118	2203	ATP synthase subunit g, mitochondrial-like
PRDM10	2455	1857	2258	1942	2684	2203	PR domain containing 10
COPS3	2349	2049	2254	2088	2098	2203	COP9 signalosome subunit 2
CLINT1	2351	1999	2312	2154	2138	2201	chloride intracellular channel 6
LUC7L3	2442	1981	2276	2178	2066	2199	LUC7-like 3 (S. cerevisiae)
ITGB1BP2	2170	2165	1982	2127	2383	2198	integrin beta 1 binding protein 1
GYTL1B	2754	2488	2388	2536	2956	2194	glycogenin 2
EXOC5	2178	1926	2226	2044	2165	2194	exocyst complex component 4
DNAJC3	2180	2108	2074	2178	2071	2194	DnaJ (Hsp40) homolog, subfamily C, member 28
DNAJC8	2288	2093	2209	1938	2023	2194	DnaJ (Hsp40) homolog, subfamily C, member 7
LOC104912483	2513	2118	2282	2170	2039	2193	uncharacterized LOC104912483
JUP	2685	2357	2551	2039	2146	2193	jun D proto-oncogene
FADS2	2082	880	1918	1492	2018	2193	fatty acid desaturase 1
SUMO1	2460	2104	2318	2174	2267	2193	small ubiquitin-like modifier 1
PPP4R2	2549	1923	2346	2041	2358	2192	protein phosphatase 4, regulatory subunit 2
PACS2	2505	1816	2343	1931	2212	2191	phosphofurin acidic cluster sorting protein 2
RHOJ	1878	2236	1725	2081	1911	2191	ras homolog family member U
ELF2	2268	2188	2112	2124	2556	2190	E74-like factor 1 (ets domain transcription factor)
ASPM							
	2596	1891	2629	2166	2041	2188	asp (abnormal spindle) homolog, microcephaly associated (Drosophila)
MPI	2068	2072	2110	2070	2304	2187	mannose phosphate isomerase
MYL9	2683	2522	2464	2030	2634	2186	myosin, light chain 9, regulatory
EGR1	2935	2089	2695	1614	2272	2186	egl-9 family hypoxia-inducible factor 3
EIF3K	2076	2095	2132	1879	1962	2184	eukaryotic translation initiation factor 3, subunit J
LOC100547843	1675	2269	1745	2540	2398	2180	pleckstrin homology domain-containing family A member 7
SERPINE2							serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor
	2814	2142	2744	2142	2090	2180	type 1), member 2
MRPL15	2144	2053	1967	1738	2008	2180	mitochondrial ribosomal protein L15
CLCN3	2257	2068	2190	1927	2103	2180	chloride channel, voltage-sensitive 2
RABGGTB	2544	2017	2501	2167	2294	2179	Rab geranylgeranyltransferase, beta subunit
MRPL20	2156	2025	2190	1895	2126	2179	mitochondrial ribosomal protein L20
LOC100540668	2028	2202	2230	2997	2218	2178	tudor and KH domain-containing protein
BNIP3	1426	2214	1631	2275	1959	2177	BCL2/adenovirus E1B 19kDa interacting protein 3
SH3BGRL	2875	2056	2730	1897	2033	2175	SH3 domain binding glutamate-rich protein like
NUP153	2410	2145	2247	1995	1985	2170	nucleoporin 153kDa
DYNC1I2	2392	2068	2357	1915	2018	2170	dynein, cytoplasmic 1, heavy chain 1
RRP9							ribosomal RNA processing 9, small subunit (SSU) processome
	2660	2318	2475	2020	2314	2170	component, homolog (yeast)
PAIP2	2305	2213	2276	2263	1974	2169	poly(A) binding protein interacting protein 2
FKBP3	2009	2440	1999	2326	2105	2169	FK506 binding protein 1B, 12.6 kDa
GPC4	2344	2153	2484	2114	2539	2168	glypican 3
CNKSR3	2151	2340	2006	2321	1757	2168	connector enhancer of kinase suppressor of Ras 1
DNAJA2	2316	1957	2223	1841	1977	2166	DnaJ (Hsp40) homolog, subfamily A, member 1
RASA1	2213	1695	2418	1808	1731	2164	RAS p21 protein activator (GTPase activating protein) 1
CHMP3	2057	2057	1988	2032	2144	2163	charged multivesicular body protein 2B
LOC104914041	2310	1972	2192	1921	1690	2161	exportin-2-like
LOC104912596	2600	1910	2496	1648	2112	2160	uncharacterized LOC104912596
STT3A							
	2664	1977	2437	1840	2059	2159	STT3A, subunit of the oligosaccharyltransferase complex (catalytic)
BUD31	2153	2124	2097	1883	2038	2157	BUD13 homolog (S. cerevisiae)
COPS2	2122	2099	2318	2382	2178	2156	coordinator of PRMT5, differentiation stimulator
WDR26	2078	1962	2180	2126	2190	2156	WD repeat domain 26

SEC31B	2320	1934	2153	2038	2346	2156	SEC31 homolog B (S. cerevisiae)
PPP2R5A	1803	2360	1969	2348	2084	2153	protein phosphatase 2, regulatory subunit B', alpha
SMC4	2769	1900	2475	1971	1886	2151	structural maintenance of chromosomes 4
SH2B2	2852	3844	2603	3285	2538	2149	SH2B adaptor protein 2
COLEC12	2621	1822	2462	2015	2578	2149	collectin sub-family member 11
SUGT1	2628	2027	2412	1992	2314	2148	SGT1, suppressor of G2 allele of SKP1 (S. cerevisiae)
MMP15	2493	2387	2224	2221	2362	2144	matrix metalloproteinase 15 (membrane-inserted)
ATL2	1858	2118	1878	2037	2055	2144	atlastin GTPase 2
DDX24	2420	1759	2278	1707	2110	2141	DEAD (Asp-Glu-Ala-Asp) box polypeptide 23
UBE2G2	2145	1970	1978	1824	1705	2140	ubiquitin-conjugating enzyme E2G 2
LOC100549854	1952	1746	2060	1723	1503	2138	eukaryotic translation initiation factor 4 gamma 3-like
TTC37	1918	1906	2096	1967	1794	2138	tetratricopeptide repeat domain 37
LOC100542292	1334	2407	1458	2179	1865	2138	thrombospondin type-1 domain-containing protein 7B-like
CNOT6	1886	1847	2172	2116	1867	2137	CCR4-NOT transcription complex, subunit 4
THOC7	2282	2088	2266	2101	2111	2136	THO complex 7 homolog (Drosophila)
ZEB2	2177	1997	2132	2259	2107	2136	zinc finger E-box binding homeobox 2
LOC100538796	2305	2119	2336	2181	2109	2135	D(1) dopamine receptor-like
ZNF711	1865	1931	1884	2050	1891	2132	zinc finger protein 711
LOC100539216	2297	2181	2276	2299	2144	2132	sterol 26-hydroxylase, mitochondrial
LOC100541391	1486	2358	1683	2477	1872	2131	olfactory receptor 14J1-like
USP14							
	2574	1880	2440	1959	2058	2131	ubiquitin specific peptidase 14 (tRNA-guanine transglycosylase)
USP5	2588	2061	2258	2011	1979	2130	ubiquitin specific peptidase 5 (isopeptidase T)
SLAIN2	2440	2117	2364	2015	2159	2128	SLAIN motif family, member 2
BRD7	2486	1994	2432	2172	2379	2128	bromodomain containing 4
STRAP	2334	1890	2201	2015	2098	2126	serine/threonine kinase receptor associated protein
IP6K3	1727	2410	2022	2529	2698	2125	inositol hexakisphosphate kinase 2
HOPX	5771	4538	3745	5104	6063	2125	hook microtubule-tethering protein 3
SAMD4A	3067	2399	2435	2236	2541	2123	sterile alpha motif domain containing 4A
DNMT3A	2417	1993	2198	2021	2208	2122	DNA (cytosine-5-)-methyltransferase 1
CCAR1	2502	1936	2186	1949	2035	2121	coiled-coil and C2 domain containing 2A
ZMAT2	1963	2127	2029	1984	2025	2120	zinc finger, matrin-type 2
TAF1							TAF1 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 250kDa
	2269	1901	2081	1891	2200	2120	
ALDH9A1	2281	2137	2087	2237	2202	2119	aldehyde dehydrogenase 9 family, member A1
MRPS14	2040	2197	2083	2073	2330	2117	mitochondrial ribosomal protein S14
ACADM	2021	2098	1850	2040	2318	2117	acyl-CoA dehydrogenase, C-4 to C-12 straight chain
LOC104911405	1955	1634	1906	1673	1942	2117	tRNA-splicing ligase RtcB homolog
RPL7L1	2567	1983	2373	1754	2021	2116	ribosomal protein L7-like 1
PLOD1	2179	1863	2440	2233	2459	2116	procollagen-lysine, 2-oxoglutarate 5-dioxygenase 1
MYLK2	1252	2383	1668	2921	2187	2115	myosin light chain kinase 2
TCOF1	2776	2004	2549	1915	2031	2114	Treacher Collins-Franceschetti syndrome 1
RRM2	3170	2115	2706	1710	1815	2114	ribonucleotide reductase M2
CD93	2400	1918	2501	1962	2146	2114	CD9 molecule
DNAJA4	3772	3573	3125	2508	2421	2114	DnaJ (Hsp40) homolog, subfamily A, member 3
ATP6AP1	2005	1818	2199	2028	1868	2110	ATPase, H+ transporting, lysosomal accessory protein 1
XPNPPEP1	1942	1701	1876	1787	1865	2110	X-prolyl aminopeptidase (aminopeptidase P) 1, soluble
RAE1	2427	1987	2321	1992	2156	2108	ribonucleic acid export 1
LOC104911748	1974	1854	1858	1872	1989	2107	uncharacterized LOC104911748
ANGPTL2	2132	2475	2466	2349	2084	2106	angiotensinogen-like 2
SARDH	1438	1775	1439	2197	1252	2105	sarcosine dehydrogenase
RALY	1830	2426	1886	2575	1878	2105	RALY heterogeneous nuclear ribonucleoprotein
MDM4	2826	1907	2341	1948	2050	2105	MDM4, p53 regulator
ZFC3H1	2129	1806	2183	2235	1992	2105	zinc finger, C3H1-type containing
CHRND	2445	2088	2274	2201	2091	2104	cholinergic receptor, nicotinic, beta 4 (neuronal)
LOC100549823	2223	1698	2081	1965	2107	2104	epididymis-specific alpha-mannosidase
RSL1D1	2541	1557	2241	1602	2052	2103	ribosomal L1 domain containing 1
NXT2	2178	1993	2148	1932	1797	2103	nuclear transport factor 2-like export factor 2
CCDC6	2630	1941	2481	2083	2477	2103	coiled-coil domain containing 59
HMGCR	2246	1209	2600	1334	1843	2102	3-hydroxymethyl-3-methylglutaryl-CoA lyase-like 1
EFTUD2	2678	2052	2340	1965	2042	2101	elongation factor Tu GTP binding domain containing 1
EIF2D							
	2134	1821	1802	1830	1823	2101	eukaryotic translation initiation factor 2B, subunit 5 epsilon, 82kDa
ZFAND3	2148	2130	2098	2221	2033	2100	zinc finger, AN1-type domain 3
HEATR1	2527	1993	2166	2085	1930	2099	highly divergent homeobox
LOC104914956	1839	1642	1796	1440	1727	2096	uncharacterized LOC104914956
DNAJB9	2407	2530	2203	1995	2119	2095	DnaJ (Hsp40) homolog, subfamily B, member 8
SHISA8	2431	1531	2271	1554	2264	2091	shisa family member 8
ALDH4A1	2116	2253	2097	2130	2325	2090	aldehyde dehydrogenase 4 family, member A1
GOLGA3	2447	2096	2274	1908	2045	2085	golgin A2
NUP85	2368	2003	2174	1733	1872	2084	nucleoporin 85kDa
DDOST	2521	2076	2369	1860	1994	2084	D-aspartate oxidase
GPDI1L	2156	2062	2268	1980	1827	2083	glycerol-3-phosphate dehydrogenase 1 (soluble)
THOC5	2272	1938	2042	2112	1981	2082	THO complex 5
SPRY2	1938	1896	1928	1835	1587	2081	sprouty homolog 2 (Drosophila)
LANCL1							
	1615	1688	1842	2146	2244	2081	late endosomal/lysosomal adaptor, MAPK and MTOR activator 5
GLRX5	1815	1697	1846	1668	2005	2079	glutaredoxin 3
LOC104914865	2007	1878	2099	1795	2177	2078	selenoprotein P-like

PRPF4B	2231	1981	2121	2044	1929	2078	pre-mRNA processing factor 4B
KIAA0368	1882	1882	1929	1990	1653	2078	KIAA0319-like ortholog
PTGES2	2039	1937	1934	1763	1982	2076	prostaglandin E synthase 2
MRPS17	2126	2038	2216	2002	2043	2074	mitochondrial ribosomal protein S17
NUDT21							
	2256	2019	2227	1733	1853	2073	nudix (nucleoside diphosphate linked moiety X)-type motif 21
TMEM169	1774	1711	1771	2177	1643	2073	transmembrane protein 169
LOC100538805	2336	1908	2202	1816	2114	2068	probable E3 ubiquitin-protein ligase HERC1
EIF2B2							
	2372	1936	2280	1958	2225	2066	eukaryotic translation initiation factor 2B, subunit 1 alpha, 26kDa
LIG3	2134	2055	2153	2034	1953	2065	ligase I, DNA, ATP-dependent
ADAMTS9							
	2349	2132	2119	2093	2554	2064	ADAM metalloproteinase with thrombospondin type 1 motif, 9
ATP1F1	1947	2183	1707	1830	1855	2063	ATPase inhibitory factor 1
STAT3							signal transducer and activator of transcription 3 (acute-phase response factor)
	2655	2298	2396	2269	1985	2063	
LOC104916307	2330	2623	2224	2485	2280	2060	eukaryotic translation initiation factor 5A-1-like
LOC100546272	1944	1609	1855	2119	2100	2060	pre-mRNA 3' end processing protein WDR33-like
LOC104910248	1220	1682	1431	2468	1626	2060	myomesin-1-like
RAB11B	2246	2038	2172	1906	1985	2060	RAB11B, member RAS oncogene family
LFNG	2390	1492	2293	1490	2262	2060	LETM1 domain containing 1
LOC100538920	1980	2073	1962	1858	2034	2059	transmembrane protein 110-like
C15H5orf15	2279	2026	2215	1935	2051	2058	chromosome 14 open reading frame, human C9orf89
NNT	1820	2012	1873	2205	1881	2058	nicotinamide nucleotide transhydrogenase
NAT10	3107	1658	2785	1786	2461	2057	N-acetyltransferase 10 (GCN5-related)
IFNGR2	1936	1891	1998	1766	1714	2056	interferon gamma receptor 1
TMEM106B	2064	1840	2137	2018	2004	2056	transmembrane protein 106B
LOC104911548	2575	2049	2246	1782	1619	2055	C-C chemokine receptor type 8-like
KLHDC4	1905	1945	1853	1710	1906	2055	kelch domain containing 2
SDCBP	2451	1995	2491	1950	2264	2053	syndecan binding protein (syntenin)
PALD1	2682	1859	2470	1966	2510	2051	phosphatase domain containing, paladin 1
LOC104912919	2214	2003	2126	1749	1913	2051	uncharacterized LOC104912919
LOC100538893	2234	1615	2161	2111	2248	2051	pepsin A-like
LOC100538902	4321	4678	3680	2448	3106	2050	uncharacterized oxidoreductase C663.09c-like
MAPK1IP1L	2419	1922	2242	1919	1982	2050	mitogen-activated protein kinase 1 interacting protein 1-like
IK	2162	2044	2078	1999	1953	2050	immunoglobulin superfamily, member 9B
CUL4B	2229	1888	2172	2115	1945	2049	cullin 4A
MRPL28	2153	1918	2065	1747	2040	2048	mitochondrial ribosomal protein L28
PRELID1	2346	1581	2043	1365	1696	2048	PRELI domain containing 1
LOC100542552							
	2645	2445	3173	2443	2635	2047	T-cell immunoglobulin and mucin domain-containing protein 4-like
PKNOX2	1733	2187	1787	2319	2008	2046	PBX/knotted 1 homeobox 2
LOC104910763	2118	2041	2225	2436	1975	2045	platelet-derived growth factor receptor alpha-like
GTF2A1	2354	1902	2404	1870	1896	2044	GS homeobox 2
TMCC2	1712	2047	1798	1462	1676	2044	transmembrane and coiled-coil domain family 2
PKIG							
	2631	1743	2416	1730	1929	2043	protein kinase (cAMP-dependent, catalytic) inhibitor gamma
ARHGAP21	2115	1961	2071	2104	2070	2038	Rho GTPase activating protein 21
EFCAB14	1941	1927	2036	2040	1821	2036	EF-hand calcium binding domain 12
FLI1	2173	2349	1917	2281	2018	2035	Fli-1 proto-oncogene, ETS transcription factor
POLR1A	2307	1637	2052	1806	1905	2035	polymerase (RNA) I polypeptide A, 194kDa
CUL5	1866	2014	1900	2484	2191	2035	cullin 4B
NKTR	2005	1841	1938	2155	2008	2035	natural killer cell triggering receptor
LOC100540041	2186	1898	2042	1979	2085	2032	interferon regulatory factor 4-like
ACP1	2256	1980	2295	1842	1948	2031	acid phosphatase 1, soluble
PRPF40A							
	2578	1727	2373	1906	2040	2027	PRP40 pre-mRNA processing factor 40 homolog A (S. cerevisiae)
ABCC9							
	1966	2418	1904	2204	1957	2026	ATP-binding cassette, sub-family C (CFTR/MRP), member 9
SRP19	2163	1770	2316	1634	1559	2025	signal recognition particle 19kDa
LOC104911024	1351	2149	1711	2219	1579	2025	uncharacterized LOC104911024
SLC19A1	1922	1696	1862	1857	2117	2025	solute carrier family 19 (folate transporter), member 1
RPF2	2482	1701	2411	1655	2046	2024	ribosome production factor 2 homolog (S. cerevisiae)
CAP1	2871	1939	2624	1765	2142	2024	calnexin
PCGF5	2402	2009	2407	2242	2062	2022	polycomb group ring finger 5
CREB3L1	2370	1510	2223	1334	1627	2022	cAMP responsive element binding protein 3
C22H20orf24	2116	1714	1997	1681	1992	2021	chromosome 22 open reading frame, human C20orf195
UBA2	2302	2001	2211	1827	1885	2021	ubiquitin-like modifier activating enzyme 2
MYO1C	2174	2187	2019	2095	2180	2020	myosin IC
LOC100551262	2610	2021	2207	2455	1711	2020	neurabin-1-like
LOC100547124	1877	1918	1911	2006	2022	2019	transmembrane protein 151B-like
HN1L	2377	1753	2198	1678	2066	2019	hematological and neurological expressed 1
MARK1	2731	2067	2517	2083	2247	2019	MAP/microtubule affinity-regulating kinase 1
HNRNPD	2354	2132	2161	1873	1895	2018	heterogeneous nuclear ribonucleoprotein A/B
LOC100548272	2327	1720	2353	1826	1885	2018	UPF0606 protein KIAA1549-like
CDH13	1794	2105	1851	2280	2173	2018	cadherin 11, type 2, OB-cadherin (osteoblast)
MCMBP	2284	1963	2205	2004	1890	2017	minichromosome maintenance complex binding protein
DRG2	2091	1687	2191	1720	2215	2015	developmentally regulated GTP binding protein 1
TMEM131	1973	1790	2003	2285	2030	2015	transmembrane protein 131

TM9SF2	2218	1929	2224	1921	1848	2014	transmembrane 9 superfamily member 2
RRAGD	2333	1992	2367	1854	2452	2012	Ras-related GTP binding D
CRY2	2033	2123	1843	2000	2348	2008	cryptochrome circadian clock 1
TIMP3	2307	2403	2015	1761	1802	2007	TIMP metalloproteinase inhibitor 3
GRPEL1	1988	1795	2001	1851	1905	2005	gastrin-releasing peptide
CAPZA2	2208	1938	2252	2057	2228	2003	capping protein (actin filament) muscle Z-line, alpha 1
FBXO30	1552	1573	1865	2145	1773	2003	F-box protein 3
TMEM33	2212	1833	2171	1768	2155	2001	transmembrane protein 33
RBBP6	2169	1887	2057	1873	1930	2001	retinoblastoma binding protein 6
YEATS2	2278	1936	2096	1767	1746	2000	YEATS domain containing 2
CRYAB	1365	1586	1680	1900	1860	2000	crystallin, alpha A
TOP1	2405	1739	2177	2023	1997	2000	topoisomerase (DNA) I
REEP5	1810	1674	2039	1665	1610	1999	receptor accessory protein 5
PHACTR2	2123	1604	2385	2153	2171	1998	phosphatase and actin regulator 2
CCNL1	1986	1992	1922	1694	1878	1998	cyclin K
RALB	2393	1687	2361	1741	2079	1998	v-ral simian leukemia viral oncogene homolog B
FAM109B	2251	1994	2092	2004	2040	1996	family with sequence similarity 109, member A
SLC39A13	2334	2042	2181	1690	2138	1995	solute carrier family 39 (zinc transporter), member 13
USP36	2898	1889	2355	1780	2229	1994	ubiquitin specific peptidase 36
HAGH							
	1625	1789	1628	1739	1959	1994	hydroxyacyl-CoA dehydrogenase/3-ketoacyl-CoA thiolase/enoyl-CoA
	1946	1754	2142	1856	1578	1994	hydratase (trifunctional protein), beta subunit
TXNL1							thioredoxin-like 1
SRF	2552	2468	2272	2185	2296	1994	serum response factor (c-fos serum response element-binding transcription factor)
	1150	1381	1678	2070	1399	1993	spectrin repeat containing, nuclear envelope 1
SYNE1	2296	1901	2183	1706	1964	1992	RNA binding protein S1, serine-rich domain
RNPS1	1831	2065	1809	1828	1585	1992	aldehyde dehydrogenase 2 family (mitochondrial)
ALDH2							ATP synthase, H+ transporting, mitochondrial F1 complex, epsilon subunit
ATP5E	1716	2288	1704	1968	1949	1992	
	2471	1836	2228	1826	2094	1992	nucleolar protein 7, 27kDa
NOL7	2380	1885	2170	1765	1876	1991	RAB, member RAS oncogene family-like 6
RABL6	1613	2970	1911	2367	2982	1991	ADAMTS-like 2
ADAMTSL2	2011	1942	1973	1740	1654	1990	presenilin associated, rhomboid-like
PARL	1849	2278	1904	2034	1964	1990	sorbin and SH3 domain containing 1
SORBS1	2310	1890	2328	1787	1955	1990	RAP1B, member of RAS oncogene family
RAP1B	2388	1773	2311	1565	1987	1989	urotensin-2 receptor-like
LOC100539860	1745	1900	1967	2366	2503	1989	selenoprotein O
LOC100539641	1594	1765	1907	1752	1806	1989	AU RNA binding protein/enoyl-CoA hydratase
AUH	1971	1743	1945	1941	1839	1989	SMAD family member 1
SMAD1	2234	1983	2003	1869	1873	1988	methionine--tRNA ligase, cytoplasmic-like
LOC104915862	1323	1501	1673	2329	1808	1988	anoctamin 1, calcium activated chloride channel
ANO1	2393	2077	2340	1868	1676	1987	cAMP responsive element binding protein 1
CREB3	2366	1873	2150	1854	2056	1987	uncharacterized LOC104914261
LOC104914261	1515	2585	1701	2700	1919	1986	KIAA1147 ortholog
KIAA1161	2192	1859	2232	1917	2164	1985	programmed cell death 5
PDCD5							
TSTD2	1451	1614	1631	1692	1426	1984	thiosulfate sulfurtransferase (rhodanese)-like domain containing 2
	2170	2047	2037	2180	1971	1983	ubiquitin specific peptidase 4 (proto-oncogene)
USP4	1579	1656	1706	1850	1886	1983	aldehyde oxidase 1
AOX1	1993	2063	1966	1930	1962	1983	protein phosphatase 1, regulatory subunit 12A
PPP1R12A	1952	1928	1914	1948	2006	1981	sterol carrier protein 2
SCP2	2050	2106	2046	2199	2104	1981	cytoplasmic polyadenylation element binding protein 3
CPEB4	2413	1950	2084	1697	1905	1980	tyrosine-protein kinase BAZ1B-like
LOC104913879	2273	2201	2212	2252	2189	1979	bcl-2-like protein 13
LOC104911835							
LAMTOR3	1973	1866	1860	1837	1781	1979	late endosomal/lysosomal adaptor, MAPK and MTOR activator 2
	1582	1915	1636	2219	2025	1979	pleckstrin homology domain containing, family G (with RhoGef domain) member 1
PLEKHG1							
	1979	1870	1943	1672	1874	1977	translocase of outer mitochondrial membrane 22 homolog (yeast)
TOMM22	2288	1911	2221	1850	2046	1976	macrophage erythroblast attacher
MAEA	1894	2138	1823	2198	1858	1975	mitochondrial fission regulator 1-like
MTRF1L	2263	1769	2273	1791	2063	1975	uncharacterized LOC104909657
LOC104909657	1892	1660	1998	1893	1938	1975	actin filament associated protein 1
AFAP1	1301	1717	1616	2047	1792	1973	ankyrin repeat and BTB (POZ) domain containing 1
ABTB1	1761	1841	1816	1842	1697	1971	mitochondrial ribosomal protein L45
MRPL45	2238	1790	2037	1714	1765	1971	YTH N(6)-methyladenosine RNA binding protein 1
YTHDF1	1912	1898	1896	1828	1959	1970	circadian associated repressor of transcription
CIB1	2163	1818	2042	1492	1741	1969	claudin 5
CLDND1	2047	1555	1834	1698	1969	1969	furry homolog (Drosophila)
FRZB	2020	1793	1889	1697	2031	1968	thioredoxin 2
TXN2	2225	1834	1965	1700	2101	1967	cytosolic iron-sulfur assembly component 1
CIAPIN1	2147	1846	1935	1868	1854	1967	zinc finger protein 628
ZNF628	2310	1821	2181	1816	1731	1966	regulator of chromosome condensation 1
RCC1	2214	1868	2095	1705	1851	1965	type I inositol 1,4,5-trisphosphate 5-phosphatase-like
LOC104912091	2229	1929	2303	1859	1885	1963	hydroxysteroid dehydrogenase like 1
HSF2	2555	2072	2248	1799	2024	1963	heterogeneous nuclear ribonucleoprotein M
HNRNPR	2518	2018	2701	2092	1996	1963	fukutin related protein
FKTN							

CDCA7L	2661	1950	2471	1675	1782	1961	cell division cycle associated 7
DDX46	2084	1953	2042	1909	1841	1961	DEAD (Asp-Glu-Ala-Asp) box polypeptide 43
LOC104915510	2157	1727	2010	1626	1883	1960	gem-associated protein 5-like
LOC104914028	1563	1571	1629	1654	1402	1960	collagen alpha-1(X) chain-like
GRIP2	2542	1677	2148	1945	2464	1960	glutamate receptor interacting protein 1
NUTF2	2496	1818	2230	1553	1834	1959	nuclear transport factor 2
SFSWAP	1822	1730	1744	1870	1680	1959	splicing factor, suppressor of white-apricot family
LAMB2	1876	2428	1753	2161	1886	1959	laminin, beta 1
NCBP2	2281	1863	2119	1636	1943	1958	nuclear cap binding protein subunit 2, 20kDa
AKAP6	1444	1601	1688	1980	1800	1958	A kinase (PRKA) anchor protein 6
LIMA1	2044	1590	2145	1694	1739	1958	lens intrinsic membrane protein 2, 19kDa
SNAP23	2512	1894	2309	1965	1986	1958	synaptosomal-associated protein, 23kDa
IMP4	2394	1901	2274	1734	1971	1957	IMP3, U3 small nucleolar ribonucleoprotein
GNA12							
	2091	1962	2182	2137	1966	1956	guanine nucleotide binding protein (G protein), alpha 11 (Gq class)
LGALS1	1770	1549	1623	2252	2570	1955	lectin, galactoside-binding, soluble, 8
FOXJ2	1922	1897	1918	1941	1858	1955	forkhead box J1
ECI1	1599	1754	1700	1768	1762	1954	enoyl CoA hydratase, short chain, 1, mitochondrial
GOLM1	1840	1961	2003	1800	1596	1953	golgi integral membrane protein 4
MRPL10	1873	1796	1818	1590	1852	1953	mitochondrial ribosomal protein L10
PIK3R2	2516	1903	2325	1856	2050	1953	phosphoinositide-3-kinase, regulatory subunit 2 (beta)
CAND1	2455	1878	2289	1733	1815	1953	calmodulin binding transcription activator 1
LOC104914793	1863	1542	1979	1766	1527	1952	transitional endoplasmic reticulum ATPase-like
TTC28	2519	1765	2243	1882	2327	1952	tetratricopeptide repeat domain 28
MSRB1	1835	1678	1832	1679	1967	1950	methionine sulfoxide reductase B1
LOC100543556	2129	1946	1939	1985	2151	1949	multidrug resistance-associated protein 4
SEC61A2	2087	1728	1939	1706	1993	1949	Sec61 alpha 2 subunit (S. cerevisiae)
MGAT4B							mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetylglucosaminyltransferase, isozyme B
	2248	1625	1996	1639	2027	1949	
TNKS							
	1935	1961	2020	1942	1870	1949	tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase
NDUFS4							NADH dehydrogenase (ubiquinone) Fe-S protein 4, 18kDa (NADH-coenzyme Q reductase)
	1813	2035	2009	1736	1535	1949	
BUB3	2328	1748	2086	1675	1833	1947	BUB1 mitotic checkpoint serine/threonine kinase
NUP205	2179	1836	2192	1947	1751	1947	nucleoporin 205kDa
CCNL2	2092	1943	1956	1808	1875	1946	cyclin L1
NDUFB7							
	1797	2235	1718	1843	2056	1941	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 7, 18kDa
MBTPS1	1880	1959	2011	2044	1898	1941	membrane-bound transcription factor peptidase, site 1
MRPS22	2056	1763	1959	1583	1659	1940	mitochondrial ribosomal protein S22
RBM26	2072	1907	2097	1840	1831	1940	RNA binding motif protein 26
LOC100543785	2969	1887	2951	1816	2219	1939	sodium channel protein type 5 subunit alpha-like
PDLIM1	2684	1941	2201	1920	2114	1939	PDZ and LIM domain 1
LOC104909799	1081	1381	1377	1860	1623	1939	eyes absent homolog 4-like
MLST8	2243	2053	2082	2025	2204	1939	MTOR associated protein, LST8 homolog (S. cerevisiae)
MTHFD1							methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1, methylenetetrahydrofolate cyclohydrolase, formyltetrahydrofolate synthetase
	2224	1424	1996	1549	1810	1938	
LOC100542830	1958	1551	1886	1627	1960	1938	interleukin-1 receptor type 1-like
EEF2K	1588	1699	1724	2005	2090	1937	eukaryotic translation elongation factor 2
TGFBR1	1895	2085	1956	1991	1950	1937	transforming growth factor, beta receptor 1
IQGAP1	2365	1862	2213	1931	2074	1937	IQ motif containing K
RRAS2	2804	1980	2448	1710	1849	1936	related RAS viral (r-ras) oncogene homolog 2
CTH							CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) small
	1763	1616	1976	1602	1892	1935	phosphatase like 2
SRSF5	1923	2077	1920	1916	1865	1935	serine/arginine-rich splicing factor 5
FBXW11	2068	1845	1996	1676	1898	1935	F-box protein 9
ULK1	1242	1583	1844	1858	1918	1935	unc-51 like autophagy activating kinase 1
METTL5	2302	1558	2286	1572	1935	1933	methyltransferase like 5
CLUH	1832	1881	1639	1895	1947	1932	clusterin associated protein 1
MOSPD1	1835	1878	1903	1835	2068	1931	motile sperm domain containing 1
RAB11FIP2	2150	1575	2053	1579	1529	1931	RAB11 family interacting protein 2 (class I)
UBTF	2176	1857	2072	1934	2011	1931	upstream binding transcription factor, RNA polymerase I
YWHAB							tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta
	2492	1841	2122	1653	1778	1930	
C1H12orf5	1177	1368	1462	1613	2059	1929	chromosome 1 open reading frame, human C12orf45
ZNF644	2261	1894	2208	1880	1846	1927	zinc finger protein 644
MINA	1868	1847	1816	1655	1698	1927	MYC induced nuclear antigen
LOC104912356	2057	2060	1986	2006	1992	1926	roquin-1-like
CECR5	1685	1411	1633	1555	1795	1926	cat eye syndrome chromosome region, candidate 1
LOC100548498	2364	1826	2193	1704	1719	1925	filamin-A-interacting protein 1
TIMM44							
	2082	1544	1859	1407	1528	1924	translocase of inner mitochondrial membrane 44 homolog (yeast)
LOC100542710	1800	1843	1783	1877	1701	1924	uncharacterized protein KIAA0355-like
DOK5	1792	2049	1745	1579	1484	1923	docking protein 4
LOC100542446	2004	1742	1913	1697	1895	1922	phosphatidylinositol transfer protein beta
RWDD4	2255	1833	2233	1810	2172	1921	RWD domain containing 4
MOC51	2055	1554	1867	1885	2171	1921	molybdenum cofactor synthesis 1
MCTS1	2349	1635	2128	1705	1841	1920	malignant T cell amplified sequence 1

SRP68	2199	1887	2035	1812	1824	1920	signal recognition particle 68kDa
DNAJB6	1835	1836	1878	1825	1808	1919	DnaJ (Hsp40) homolog, subfamily B, member 5
FAM126A	1833	1712	1861	1845	1786	1919	family with sequence similarity 1248
RRP1B	2247	1735	2112	1779	1786	1918	ribosomal RNA processing 1B
ENDOD1	1833	2158	1813	1918	1661	1918	ectodermal-neural cortex 1 (with BTB domain)
LOC104911174	1562	1708	1763	2650	2000	1918	ryanodine receptor 3-like
FNBP4	2103	2054	2015	1909	1953	1918	formin binding protein 1
MEMO1	2227	1733	2005	1832	2063	1917	mediator of cell motility 1
LOC104911083	1965	1868	1931	1705	1791	1914	transmembrane protein 87A-like
SLC25A24							solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 24
LOC104911421	2168	1836	2219	2047	2236	1914	
	1808	1653	1768	1695	1600	1913	pituitary tumor-transforming gene 1 protein-interacting protein-like
LOC104917129	1562	2041	1825	1981	2966	1911	uncharacterized LOC104917129
BRI3BP	2673	1919	2289	1576	1852	1910	brain protein I3
LARP1B	2073	1901	2025	2036	2378	1906	La ribonucleoprotein domain family, member 1
FABP3	1639	3617	1542	1822	1637	1904	fatty acid binding protein 2, intestinal
WBP11	2286	1826	2051	1723	1821	1904	WW domain binding protein 11
SH3BGR13	2179	2015	2131	1830	2002	1904	SH3 domain binding glutamate-rich protein like 3
ZC3H11A	2028	1930	1828	1981	1925	1902	zinc finger CCH-type containing 11A
SLC16A1							
	2403	2184	2098	2218	2095	1901	solute carrier family 16 (monocarboxylate transporter), member 1
GOS2	1667	2334	1668	1403	1786	1897	fizzy/cell division cycle 20 related 1 (Drosophila)
PCCB	1871	2271	1809	2193	1861	1897	propionyl CoA carboxylase, beta polypeptide
GPCPD1	1674	1911	1751	1987	1724	1895	glypican 5
ARFGAP2	1940	1793	1823	1802	1899	1895	ADP-ribosylation factor GTPase activating protein 2
RAPSN	1214	1324	1338	1483	1738	1895	receptor-associated protein of the synapse
TRMT13	1284	1515	1506	1714	2071	1895	tRNA methyltransferase 13 homolog (S. cerevisiae)
UBIAD1	2044	1731	2050	1690	1971	1894	UBiA prenyltransferase domain containing 1
LOC100539152	2169	1925	2165	1939	1956	1893	dispanin subfamily A member 2b-like
MTCH2	1899	1765	1937	1590	1756	1893	mitochondrial carrier 2
TK1	2479	1790	2109	1375	1457	1889	thymidine kinase 1, soluble
ALYREF	2427	1804	2218	1464	1607	1889	Aly/REF export factor
EIF6	2013	1778	1920	1652	1762	1889	eukaryotic translation initiation factor 5B
CNIH1	2235	1631	1997	1449	1840	1888	cyclic nucleotide gated channel beta 3
CCDC124	1960	1839	1821	1735	2004	1887	coiled-coil domain containing 122
LOC100539183	2712	1604	3034	2389	1880	1886	olfactory receptor 14A16-like
LOC100550119	1685	1966	1701	2429	1873	1886	prolactin-releasing peptide receptor-like
SEC62	2005	1835	1981	1675	1788	1886	SEC62 homolog (S. cerevisiae)
PPAP2B	1978	2068	1831	1672	1723	1884	phosphatidic acid phosphatase type 2B
LOC100546539	2063	2955	1682	2379	4109	1883	MICOS complex subunit MIC19-like
LOC100542800	2135	1555	1928	1569	1822	1883	astrotactin-1
WDR82	2102	1706	1943	1611	1759	1882	WD repeat domain 82
CRAT	1106	2020	1257	2222	1557	1882	Crm, cramped-like (Drosophila)
LMF2	2640	1793	2219	1632	1874	1881	lipase maturation factor 1
FBLN5	1472	2189	1925	2060	1729	1878	fibulin 2
COL4A6	1921	2367	1852	2732	1429	1878	collagen, type IV, alpha 5
ARL6IP1	2065	1706	2038	1776	1664	1877	ADP-ribosylation factor-like 6 interacting protein 1
PHF3	2129	1720	2020	1939	2000	1876	PHD finger protein 3
NFYC	1851	1811	1841	1638	1817	1875	nuclear transcription factor Y, gamma
LONP1	1891	1678	1828	1584	1592	1875	lon peptidase 1, mitochondrial
PSMD11							
	2103	1734	2044	1863	1807	1875	proteasome (prosome, macropain) 26S subunit, non-ATPase, 11
FAM133B	2437	1736	2229	1601	1786	1874	family with sequence similarity 132, member A
LOC100550767	2311	1682	2169	1632	1905	1874	glucosamine-6-phosphate isomerase 1
GGH	1987	1844	2119	1906	1840	1874	gamma-glutamyl carboxylase
PIPG	2506	1850	2225	1794	1781	1873	peptidylprolyl isomerase G (cyclophilin G)
TIMM8A							
	2285	1858	2031	1552	2146	1871	translocase of inner mitochondrial membrane 8 homolog A (yeast)
LOC100541776	1406	1652	1569	1563	1309	1871	BTG3 associated nuclear protein
ZFYVE16	1708	1671	1910	1745	1638	1869	zinc finger, FYVE domain containing 16
NUP50	1986	1681	1983	1620	1910	1868	nucleoporin 50kDa
LOC100542752							
	2081	1875	2213	1923	1751	1866	von Willebrand factor D and EGF domain-containing protein-like
MCL1	2228	1911	2138	1800	2189	1866	myeloid cell leukemia 1
TGFBR2	2250	2156	2091	2155	1992	1863	transforming growth factor, beta receptor II (70/80kDa)
ACLY	2376	1346	2320	1445	1576	1863	ATP citrate lyase
TBRG4	2061	1703	1941	1662	1707	1862	transforming growth factor beta regulator 4
GP5	2120	1672	2014	1617	1685	1861	glycoprotein Ib (platelet), beta polypeptide
TCEA3	1093	2397	1324	3100	1576	1855	transcription elongation factor A (SII), 3
PPP2R4	1744	1904	1741	1780	1907	1854	protein phosphatase 2A activator, regulatory subunit 4
REXO2	1960	1871	1952	1821	1798	1854	RNA exonuclease 2
PHF20	1925	1741	1848	1661	1745	1853	PHD finger protein 20
PDZRN3	1450	1613	1624	1828	1666	1851	PDZ domain containing ring finger 3
HECTD4	1783	1724	1864	2004	1711	1850	HECT domain containing E3 ubiquitin protein ligase 2
LAP3	2191	1632	2029	1696	2001	1850	LanC lantibiotic synthetase component C-like 3 (bacterial)
SMEK2	2289	1958	2072	1804	1811	1850	SMEK homolog 2, suppressor of mek1 (Dictyostelium)
FRY	1421	1841	1480	2114	2017	1849	fibroblast growth factor receptor substrate 3
DUT	2632	1838	2262	1451	1626	1848	dual specificity phosphatase 8

ACSS2	1806	1964	1665	1695	1647	1848	acyl-CoA synthetase short-chain family member 2
CEBPZ	2255	1590	2008	1699	1859	1848	CCAAT/enhancer binding protein (C/EBP), gamma
RHEB	2141	1827	2063	1661	1882	1847	Ras homolog enriched in brain
MYO16	1495	957	1958	1494	2113	1847	myosin XVI
PRELP	2464	1950	2200	2072	2304	1846	proline/arginine-rich end leucine-rich repeat protein
CCNH	1710	1613	1815	1515	1269	1846	cyclin G2
PPP3CA	2193	1976	1926	2185	2038	1845	protein phosphatase 3, catalytic subunit, alpha isozyme
RNF207	1128	2050	1307	1380	1930	1844	ring finger protein 207
GATB	1696	1465	1837	1620	1677	1844	GATA zinc finger domain containing 2B
LOC100543343	1696	1862	1771	1616	1738	1844	cell adhesion molecule 3
ZW10	2026	1600	1920	1639	1808	1843	zw10 kinetochore protein
PPP1R15B	1814	1757	1878	1673	1701	1843	protein phosphatase 1, regulatory subunit 15B
PIEZO1	2289	2441	1778	1970	1793	1842	piezo-type mechanosensitive ion channel component 1
TPP2	1571	2022	1666	2610	1400	1842	tripeptidyl peptidase II
KPNA6	2265	1765	2037	1789	2009	1840	karyopherin alpha 5 (importin alpha 6)
XRCC5							X-ray repair complementing defective repair in Chinese hamster cells 5
	1817	1538	1919	1744	1507	1839	(double-strand-break rejoining)
PAXBP1	2038	1675	1966	1720	1826	1838	PAX3 and PAX7 binding protein 1
DXH38	2068	1851	1913	1736	1732	1838	DEAH (Asp-Glu-Ala-His) box polypeptide 37
MED13	1917	1843	1854	1892	1956	1838	mediator complex subunit 13
FAM21C	2042	1719	1958	1708	1890	1838	family with sequence similarity 219, member B
MICAL1	2103	1591	2022	1742	1926	1837	MICAL-like 1
ATP2C1	1960	1635	1876	1625	1723	1836	ATPase, Ca++ transporting, type 2C, member 1
TAF2							TAF2 RNA polymerase II, TATA box binding protein (TBP)-associated
	1713	1741	1758	1729	1681	1836	factor, 150kDa
UBXN2A	1766	1792	1869	1901	2090	1836	UBX domain protein 2A
MRPL33	2238	1733	1961	1619	1939	1834	mitochondrial ribosomal protein L33
AREL1	1849	1619	1731	1607	1641	1832	apoptosis resistant E3 ubiquitin protein ligase 1
HERC4							
	2273	1823	2102	1886	1799	1832	HECT and RLD domain containing E3 ubiquitin protein ligase 3
TTYH2	1893	1640	1938	1704	1511	1831	tweety family member 2
PTPN21	1563	2402	1732	2220	1402	1831	protein tyrosine phosphatase, non-receptor type 21
FHOD3	1795	1529	1887	1710	1987	1831	formin homology 2 domain containing 1
LOC100545741	1725	2263	1705	2126	1756	1830	uncharacterized LOC100545735
C30H19orf10	2093	1796	2034	1736	1640	1830	complement component 3
DHRS7B	1440	1859	1421	1725	1851	1829	dehydrogenase/reductase (SDR family) member 7
LOC100538712	2243	1610	2040	1583	2125	1829	kinesin-like protein KIF2A
PTMS	2604	1617	2209	1585	2070	1829	parathyromosin
EIF2B5							
	1988	1705	1765	1687	1738	1825	eukaryotic translation initiation factor 2B, subunit 4 delta, 67kDa
PLXNB2	1994	1691	1994	1961	1647	1824	plexin B2
ATP6V0E1	1941	1848	1932	1613	1869	1824	ATPase, H+ transporting, lysosomal 9kDa, V0 subunit e1
RNF139	1882	2080	1889	1859	1848	1823	ring finger protein 139
ST3GAL6	2016	2219	2211	2074	1872	1823	ST3 beta-galactoside alpha-2,3-sialyltransferase 6
MLF2	2101	1692	1931	1633	1775	1823	myeloid leukemia factor 2
UBE2H	1786	2029	1813	2237	2114	1822	ubiquitin-conjugating enzyme E2H
MAR8							
	1945	1805	1966	1688	1798	1821	membrane-associated ring finger (C3HC4) 8, E3 ubiquitin protein ligase
SIRT1	1516	1659	1668	2015	1801	1821	sirtuin 1
COQ5	1983	1645	1730	1541	1754	1818	coenzyme Q4
LOC104917114	1274	2565	1653	3334	3357	1818	uncharacterized LOC104917114
LOC104909318	1852	4465	2466	3885	4010	1816	elastin
AGRN	2116	1753	1866	1716	1774	1815	agrin
BRIX1	1878	1471	1972	1333	1264	1814	BRCA1 interacting protein C-terminal helicase 1
EMC1	2072	1747	1909	1710	1863	1814	embigin
CEBPZ	1828	1716	2031	1635	1744	1811	CCAAT/enhancer binding protein (C/EBP), beta
TOMM70A							translocase of outer mitochondrial membrane 70 homolog A (S.
	1843	1719	1886	1746	1686	1810	cerevisiae)
RNF114	1891	1579	1826	1625	1756	1807	ring finger protein 114
LOC104910286	1584	1863	1445	2055	1911	1806	uncharacterized LOC104910286
CPSF6	2096	1622	2000	1740	1745	1805	cleavage and polyadenylation specific factor 4, 30kDa
ODC1	2368	1597	2192	1532	1783	1805	ornithine decarboxylase 1
MRPS27	1801	1499	1946	1420	1333	1802	mitochondrial ribosomal protein S27
HRAS	2502	2150	2360	1984	2017	1801	hemopexin
MAP7D1	1854	1996	1793	2022	1958	1800	MAP7 domain containing 1
MYO23	1062	2324	1258	2103	1993	1800	myozenin 3
SHROOM3	2233	1940	2204	1647	1519	1800	shroom family member 3
SHFM1	1840	1663	1703	1509	1696	1800	split hand/foot malformation (ectrodactyly) type 1
PLA2R1	2519	1624	2350	2125	2670	1799	phospholipase A2 receptor 1, 180kDa
PPP6R2	1618	1898	1621	1664	1751	1798	protein phosphatase 6, regulatory subunit 2
SLC38A6	1514	1769	1567	1776	1608	1798	solute carrier family 38, member 6
MAFA							
	1632	1685	1551	2331	1874	1798	v-maf avian musculoaponeurotic fibrosarcoma oncogene homolog A
SPAG9	1678	1692	1641	2185	1810	1797	sperm associated antigen 9
TCERG1	2192	1777	1929	1702	1676	1797	transcription elongation regulator 1
SDE2	2127	1726	2020	1585	1884	1796	SDE2 telomere maintenance homolog (S. pombe)
LOC100539940	2007	1751	1904	1715	1740	1794	RILP-like protein 1
GLS	1783	1392	1751	1741	2726	1794	glutaredoxin 5
COL16A1	1966	2254	2094	1572	1579	1794	collagen, type XV, alpha 1

CARS	1707	1527	2104	1543	1693	1792	carnosine synthase 1
LOC100546114	1865	1774	1913	1299	1619	1792	T-box-containing protein TBX6L
CAST	1935	1760	1880	1655	1467	1791	calcium-sensing receptor
TCHP	2036	1611	1925	1460	1902	1791	trichoplein, keratin filament binding
ARNT	1850	1778	1854	1797	1939	1791	aryl hydrocarbon receptor nuclear translocator
SLC38A10	2334	1705	2079	1566	1804	1790	solute carrier family 38, member 10
HELLS	2889	1808	2246	1508	1609	1790	helicase (DNA) B
JAG2	2515	1820	2139	1703	1796	1790	jagged 1
STAG2	1949	1705	1888	1989	1793	1789	stromal antigen 2
MCM6	2660	1709	2270	1437	1565	1787	minichromosome maintenance complex component 6
ABCA2	1955	1642	1683	1782	1824	1787	ATP-binding cassette, sub-family A (ABC1), member 2
LOC104916609	1143	947	1387	2169	1373	1786	uncharacterized LOC104916609
TRIM47	2565	1841	2302	1967	2344	1786	tripartite motif containing 47
ZMYND11	1488	1681	1738	1797	1555	1784	zinc finger, MYND-type containing 11
LOC100546640	2048	1723	1985	1671	1729	1783	transmembrane protein 181
SEC24C	2195	1804	1999	1849	1878	1783	SEC24 family member C
DSCR3	1370	1801	1628	1742	1859	1781	DNA replication and sister chromatid cohesion 1
DIP2B	1912	1441	1832	1581	1755	1780	DIP2 disco-interacting protein 2 homolog A (Drosophila)
SBK2	1876	1421	1968	1261	2003	1779	SH3 domain binding kinase family, member 2
DNAJB14	2013	1669	2015	1742	1866	1779	DnaJ (Hsp40) homolog, subfamily B, member 13
ADAM33	2079	1835	2030	1909	1693	1778	ADAM metallopeptidase domain 33
LOC100544724	1713	1894	1610	2120	1639	1778	serpin family A member 1
OClAD1	1671	1505	1660	1446	1576	1778	OClA domain containing 1
LOC100542258	1461	1605	1626	2063	1630	1777	feather keratin 1-like
LYAR	2161	1388	1979	1336	1792	1776	Ly1 antibody reactive
LOC100538586	2162	1627	1984	1678	1876	1775	homeobox protein DLX-3-like
MCM2	2885	1951	2373	1495	1702	1775	minichromosome maintenance complex component 2
NUP160	2551	1712	2182	1567	1726	1774	nucleoporin 160kDa
ZNF335	2308	1851	2090	1834	1927	1774	zinc finger protein 335
GNAI2	2209	1881	2106	1693	1951	1774	guanine nucleotide binding protein (G protein), alpha inhibiting activity
SENP5	1719	1456	1587	1506	1903	1773	polypeptide 1
SESN1	1600	1901	1735	2944	1501	1773	SUMO1/sentrin specific peptidase 5
MRPL57	1946	1892	1875	1783	1825	1773	sestrin 1
B4GALT5							mitochondrial ribosomal protein L57
GNL2	1988	1535	1981	1391	1876	1773	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 5
CSNK2A1	2074	1703	1798	1808	1543	1773	guanine nucleotide binding protein (G protein), gamma transducing
HAUS6	2087	1704	2030	1776	1884	1771	activity polypeptide 2
EPDR1	1988	1613	2058	1481	1239	1771	casein kinase 1, gamma 2
PAN2	1239	1625	1568	1775	1912	1770	HAUS augmin-like complex, subunit 3
PHF21A	1923	1833	1837	1495	1622	1770	epithelial cell adhesion molecule
SCOC	1651	1921	1781	1887	1706	1769	PAN2 poly(A) specific ribonuclease subunit
LOC100548741	2028	1555	1924	1557	1834	1769	PHD finger protein 21A
ZNF593	1590	1580	1598	1687	1661	1768	short coiled-coil protein
CNR1	1807	1988	1799	1812	1717	1768	cohesin subunit SA-2-like
MRPS25	2114	1593	1928	1794	1712	1768	zinc finger protein 593
SEL1L	1873	1794	1849	1692	1808	1766	canopy FGF signaling regulator 3
ADPRH	1769	1586	1762	1652	1644	1766	mitochondrial ribosomal protein S25
NFIL3	1848	1894	1664	1624	1914	1766	sel-1 suppressor of lin-12-like (C. elegans)
JUN	1487	1396	1676	1806	1266	1765	ADP-ribosylarginine hydrolase
LAMAS5	1753	1741	1825	1831	1459	1765	nuclear factor, interleukin 3 regulated
LOC104916292	3111	1962	2583	1795	1997	1764	junctophilin 2
GPR107	1211	1915	1030	1472	1434	1763	laminin, alpha 4
STRN3	1642	1665	1552	1619	1394	1761	hemojuvelin-like
MAGOH	2173	1693	2081	1985	1919	1761	G protein-coupled receptor 1
LOC100539934	1982	1717	1636	1389	1451	1760	striatin, calmodulin binding protein 3
LOC100544502	1412	2103	1572	2355	1527	1760	mago-nashi homolog, proliferation-associated (Drosophila)
SUGP2	2087	1581	1911	1510	1812	1759	uncharacterized LOC100539929
FUBP1	1920	1598	1923	1716	1785	1758	glutathione S-transferase C-terminal domain-containing protein
CCNDBP1	2031	1450	1899	1782	1518	1757	SURP and G patch domain containing 2
HTRA1	1595	1585	1537	1525	1445	1754	FtsJ homolog 3 (E. coli)
TBC1D4	2084	2111	1879	1876	2123	1753	cyclin D3
SESTD1	1671	1795	1786	1957	1897	1753	5-hydroxytryptamine (serotonin) receptor 7, adenylate cyclase-coupled
NECAP1	1680	1642	1802	1828	1618	1752	TBC1 domain family, member 4
PSMD6	1654	1559	1609	1384	1431	1752	SEC14 and spectrin domains 1
TRRAP	2178	1518	2058	1684	1751	1751	NECAP endocytosis associated 1
ACAT2	2172	1579	1990	1749	1708	1749	proteasome (prosome, macropain) 26S subunit, non-ATPase, 6
TRIP12	1586	779	1911	1012	1410	1749	transformation/transcription domain-associated protein
LOC104916452	1682	1626	1707	2015	1712	1749	acetyl-CoA acetyltransferase 2
ELOVL5	1975	1553	1876	1364	1643	1748	thyroid hormone receptor interactor 12
MAR7	2005	1332	1798	1386	1799	1746	spliceosome RNA helicase DDX39B-like
CNTRL	1683	1613	1778	1546	2034	1746	ELOVL fatty acid elongase 4
	1644	1457	1820	1586	1453	1746	membrane-associated ring finger (C3HC4) 7, E3 ubiquitin protein ligase
							contactin associated protein-like 2

UTP15							UTP15, U3 small nucleolar ribonucleoprotein, homolog (S. cerevisiae)
TNPO3	1821	1485	1826	1382	1361	1745	transportin 3
RSRC2	2027	1611	1940	1600	1816	1744	arginine/serine-rich coiled-coil 2
SUZ12	1778	1763	1850	1690	1597	1743	SUZ12 polycomb repressive complex 2 subunit
LOC100538357	2251	1670	2046	1445	1709	1742	multidrug resistance protein 1
PPAPDC3	1815	1745	1751	1538	1637	1742	phosphatidic acid phosphatase type 2 domain containing 3
EPAS1	1082	1497	1314	1463	1890	1741	E1A binding protein p400
TTC3	1809	1707	1810	1782	1760	1741	tetratricopeptide repeat domain 3
EXOSC2	1949	1556	1718	1626	1779	1741	exosome component 10
LOC100544306	1691	1436	1536	1258	1556	1741	claudin-19-like
SEC24D	2072	1652	1836	1675	1740	1741	SEC24 family member D
ABCA3	1896	1563	1824	1496	1765	1740	ATP-binding cassette, sub-family A (ABC1), member 3
TSG101	2029	1820	1784	1799	1895	1739	tumor susceptibility 101
ANAPC1	1575	1566	1610	1476	1701	1739	anaphase promoting complex subunit 1
ANKFY1	2008	1566	1853	1423	1584	1739	ankyrin repeat and FYVE domain containing 1
PHF5A	1974	1730	1861	1705	1887	1738	PHD finger protein 5A
SNX12	1781	1791	1813	1668	1542	1738	sorting nexin 12
KBTBD2	2042	1677	1926	1634	1729	1738	kelch repeat and BTB (POZ) domain containing 13
HECA	1980	1753	1696	1659	1825	1738	heme binding protein 1
MRPL40	1940	1870	2012	1710	1689	1737	mitochondrial ribosomal protein L40
PCYOX1	1709	1806	1660	1672	1580	1737	prenylcysteine oxidase 1
BCLAF1	1568	2037	1512	1951	1746	1736	BCL2-associated transcription factor 1
RAB21	1801	1726	1837	1669	1567	1736	RAB21, member RAS oncogene family
GPX4	1765	1586	1733	1535	1578	1735	glutathione peroxidase 3 (plasma)
LOC104916044	1712	1743	1779	1511	1546	1734	heterogeneous nuclear ribonucleoprotein C-like
SEPT11	1979	1481	1935	1591	1616	1734	septin 11
FHL3	1821	1616	1796	1519	1698	1732	four and a half LIM domains 2
P2RY1	2749	2022	2345	1780	2145	1731	purinergic receptor P2Y, G-protein coupled, 1
NIT2	1928	2278	1671	2210	1881	1731	nitrilase family, member 2
PCM1	1471	1849	1819	1563	1661	1731	pericentriolar material 1
LOC100549894	1782	1911	1838	2069	1932	1731	cytochrome b-c1 complex subunit 1, mitochondrial
TMX3	2188	1464	1939	1434	1696	1730	thioredoxin-related transmembrane protein 3
RBM22	1853	1481	1868	1542	1605	1730	RNA binding motif protein 22
TMEM184B	2111	1692	1945	1617	1705	1730	transmembrane protein 184B
CCNA2	1995	1704	1865	1670	1821	1728	cyclin A1
ST6GALNAC6	2357	1503	2134	1505	1543	1727	ST6 (alpha-N-acetyl-neuraminyl-2,3-beta-galactosyl-1,3)-N-acetylglactosaminide alpha-2,6-sialyltransferase 6
LOC104912803	1090	1972	1228	2034	1838	1727	uncharacterized LOC104912803
PHRF1	1557	1469	1529	1387	1443	1727	PHD and ring finger domains 1
FNDC5	1755	1607	1745	1634	1686	1726	fibronectin type III domain containing 4
LOC104912940	1722	1839	1577	1728	1314	1726	uncharacterized LOC104912940
MKRN1	1364	1534	1382	1578	1675	1725	makorin ring finger protein 1
NIP7	1598	1556	1575	1602	1745	1724	NIP7, nucleolar pre-rRNA processing protein
WDR75	2008	1600	1871	1499	1791	1724	WD repeat domain 75
TMPRS512	2062	1701	2000	1627	1726	1724	transmembrane (C-terminal) protease, serine 12
LEMD2	1794	1678	1819	1555	1669	1723	leucine, glutamate and lysine rich 1
BAHCC1	1780	1790	1740	1731	1709	1723	BAH domain and coiled-coil containing 1
SLC29A1	2486	1775	2125	1569	1597	1722	solute carrier family 29 (equilibrative nucleoside transporter), member 1
SEPN1	1813	1622	1774	1599	1861	1722	selenoprotein N, 1
STX2	1891	1741	1888	1482	1670	1721	syntaxin 2
SEC16A	1856	1847	1773	1729	1585	1721	SEC16 homolog A (S. cerevisiae)
MRPL22	1916	1701	1862	1690	1744	1720	mitochondrial ribosomal protein L22
FNBP1	1771	1517	1639	1359	1595	1718	fructosamine 3 kinase related protein
SRP9	1715	1527	1601	1807	1681	1717	signal recognition particle 9kDa
UBE2L3	2101	1701	1932	1574	1938	1714	ubiquitin-conjugating enzyme E2L 3
TSC1	1934	1567	1919	1760	1863	1714	tuberous sclerosis 1
NFU1	1151	1280	1176	1676	1043	1714	NFU1 iron-sulfur cluster scaffold
KDM3A	1748	1603	1636	1544	1481	1714	lysine (K)-specific demethylase 2B
POLR2E	1630	1565	1700	1823	1776	1713	polymerase (RNA) II (DNA directed) polypeptide E, 25kDa
NDUF56	1823	1572	1726	1550	1767	1712	NADH dehydrogenase (ubiquinone) Fe-S protein 6, 13kDa (NADH-coenzyme Q reductase)
LOC100548480	1579	1907	1608	1599	1649	1711	ETS translocation variant 3-like
SMTN	1362	2094	1606	2309	1685	1711	smoothelin
SAR1A	1984	1609	1737	2515	1772	1711	secretion associated, Ras related GTPase 1A
MAPK8IP3	1793	1584	1767	1426	1594	1710	mitogen-activated protein kinase 8 interacting protein 3
FARSA	1928	2179	1803	1875	1856	1710	phenylalanyl-tRNA synthetase 2, mitochondrial
ADAMTSL5	2034	1727	1936	1688	1861	1709	ADAMTS-like 5
SPATA7	1405	1780	1285	1069	904	1709	spermatogenesis associated 7
GPS1	2629	3274	2284	2377	1867	1707	GPRIN family member 3
BCAT1	1731	1540	1671	1535	1675	1707	branched chain amino-acid transaminase 1, cytosolic
ADIPOQ	1396	1600	1554	2159	2494	1706	cathepsin S
COL23A1	1698	1766	1621	1451	1428	1706	adiponectin, C1Q and collagen domain containing
NAIF1	1350	2170	1168	2292	1556	1705	collagen, type XX, alpha 1
MINOS1	1876	1501	1739	1472	1718	1703	nuclear apoptosis inducing factor 1
CADM1	2022	1727	1848	1527	1875	1703	mitochondrial inner membrane organizing system 1
	1744	1678	1708	1470	1709	1702	carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase
	1499	1620	1578	1867	1381	1702	

LOC104916196	1486	1848	1492	1735	1869	1702	ryanodine receptor 1-like
HMGCS1	1373	856	1674	1054	1225	1701	3-hydroxy-3-methylglutaryl-CoA reductase
NSFL1C	1922	1614	1823	1439	1621	1701	NSFL1 (p97) cofactor (p47)
HK2	2253	2131	2041	1695	1798	1701	hexokinase 1
IARS2	1527	1578	1560	1565	1305	1700	isoleucyl-tRNA synthetase
LOC104912931	1114	1494	1177	1999	1104	1699	probable C-mannosyltransferase DPY19L3
ASB5	2820	2425	2800	2560	2254	1699	ankyrin repeat and SOCS box containing 5
HSPA4L	2378	1508	1955	1373	1719	1698	heat shock 70kDa protein 4
PDLIM4	1951	2079	1744	1802	1575	1698	PDZ and LIM domain 4
LOC104914212	1741	1568	1723	1570	1701	1696	protein SON-like
SNRPB	2090	1641	1998	1377	1566	1695	small nuclear ribonucleoprotein polypeptides B and B1
MOB1B	1849	1802	1753	1697	1853	1695	MOB kinase activator 1B
OSBP	1938	1524	1749	1529	1626	1694	oxysterol binding protein
ZNF532	1523	1387	1718	1729	1322	1693	zinc finger protein 532
MIA3	1895	1708	1775	1817	1739	1692	melanoma inhibitory activity family, member 3
ATP11C	2091	1566	1909	1554	1659	1692	ATPase, class VI, type 11C
HDAC8	1774	1668	1772	1602	1712	1691	histone deacetylase 7
LOC100547760	1942	1619	1716	1495	1607	1690	26S proteasome non-ATPase regulatory subunit 14
CCDC43	1545	1488	1466	1464	1600	1690	coiled-coil domain containing 42B
PLOD2	2332	1977	2449	1812	2119	1690	procollagen-lysine, 2-oxoglutarate 5-dioxygenase 2
CDC42EP3	1048	1736	1286	1753	1289	1686	CDC42 effector protein (Rho GTPase binding) 2
MPC2	1677	1405	1707	1493	1594	1686	mitochondrial pyruvate carrier 2
MAP3K4	2326	3141	1850	2108	1735	1685	mitogen-activated protein kinase kinase kinase 4
ZC3H7B	1829	1508	1732	1814	1842	1684	zinc finger CCHH-type containing 7B
ATP6V1B2							
	1938	1501	1873	1368	1682	1684	ATPase, H+ transporting, lysosomal 56/58kDa, V1 subunit B2
LOC100540839							
	938	1698	1355	2246	1860	1684	putative dimethylaniline monooxygenase [N-oxide-forming] 6
GET4	1932	1632	1744	1681	1668	1684	GEN1 Holliday junction 5' flap endonuclease
ACAP2	2047	1683	1888	1677	1774	1684	ArfGAP with coiled-coil, ankyrin repeat and PH domains 2
HDHD3	1634	1754	1528	1491	1603	1684	haloacid dehalogenase-like hydrolase domain containing 2
AP3D1	1885	1583	1646	1542	1666	1683	adaptor-related protein complex 3, delta 1 subunit
TXNDC5	1964	1585	1897	1509	1473	1683	thioredoxin domain containing 5 (endoplasmic reticulum)
STK3	2129	1887	1977	1723	1929	1683	serine/threonine kinase 3
WTAP	1827	1626	1786	1518	1573	1682	Wilms tumor 1 associated protein
XPNPEP3	1501	1512	1466	1446	1319	1682	X-prolyl aminopeptidase (aminopeptidase P) 3, putative
NOC4L	1783	1353	1720	1440	1591	1681	nucleolar complex associated 4 homolog (S. cerevisiae)
POLR2L							
	1519	1867	1634	1536	1711	1681	polymerase (RNA) II (DNA directed) polypeptide L, 7.6kDa
JMJD6	2034	1692	1543	1393	2224	1681	jumonji domain containing 4
RNASEK	1658	1595	1594	1300	1584	1680	ribonuclease, RNase K
BCAS1	1948	1701	1830	1433	1067	1680	breast carcinoma amplified sequence 1
CC2D1B	1779	1541	1788	1531	1529	1679	chibby homolog 1 (Drosophila)
KSR1	1841	1645	1824	2095	1877	1679	keratinocyte associated protein 3
KIF15	2297	1441	2212	1453	1473	1678	kinesin family member 14
SPOPL	1436	1449	1571	1485	1514	1678	speckle-type POZ protein-like
TNIK	1815	1506	1755	1695	1765	1678	TRAF2 and NCK interacting kinase
NDUFC1							
	1882	1788	1872	1644	1930	1677	NADH dehydrogenase (ubiquinone) 1, subcomplex unknown, 1, 6kDa
EIF2A	1825	1557	1718	1554	1617	1676	eukaryotic translation initiation factor 1B
DNAJC13	1727	1449	1699	1666	1516	1676	DnaJ (Hsp40) homolog, subfamily C, member 12
CLNS1A							
	1749	1511	1604	1415	1468	1675	ceroid-lipofuscinosis, neuronal 8 (epilepsy, progressive with mental retardation)
NUP188	1883	1425	1850	1541	1548	1675	nucleoporin 188kDa
UBE2O	1895	1604	1837	1637	1723	1674	ubiquitin-conjugating enzyme E2O
FBXO31	1601	1555	1513	1731	1856	1673	F-box protein 30
MVD	1389	870	1488	1048	1313	1672	mevalonate (diphospho) decarboxylase
YTHDC1	1457	1639	1628	1772	1503	1670	YTH domain containing 1
ZNF512	1715	1454	1609	1440	1679	1670	zinc finger protein 512
MCM4	2340	1569	1849	1392	1503	1669	minichromosome maintenance complex component 4
SYT11	1685	1578	1397	1436	1710	1669	synaptotagmin XI
UHMK1	1887	1542	1703	1449	1735	1668	U2AF homology motif (UHM) kinase 1
VGLL3	2036	1502	1752	1878	2138	1667	vestigial-like family member 3
C2H1orf198	1596	1650	1672	1506	1345	1667	chromosome 2 open reading frame, human C1orf131
LOC100538821	2052	1552	2018	1167	1508	1667	polycomb complex protein BMI-1
MRPL34	1636	1695	1608	1693	1831	1667	mitochondrial ribosomal protein L34
KDM1A	1881	1470	1762	1484	1632	1665	keratinocyte differentiation factor 1
GPR56	1584	1494	1577	1667	1504	1664	G protein-coupled receptor 55
LOC100543412	1856	1588	1740	1566	1756	1663	cytosolic phospholipase A2 epsilon-like
PRDX4	2026	1708	1894	1441	1462	1663	peroxiredoxin 4
DNAJC2	1989	1393	1814	1575	1935	1662	DnaJ (Hsp40) homolog, subfamily C, member 19
HIVEP2							
	2098	1888	1956	1696	1969	1662	human immunodeficiency virus type I enhancer binding protein 1
MTO1	1805	1525	1712	1386	1499	1662	mitochondrial tRNA translation optimization 1
TFDP1	2293	1541	2082	1492	1589	1660	transcription factor Dp-1
MRPL12	1723	1745	1616	1422	1588	1660	mitochondrial ribosomal protein L12
SKP2							
	1788	1499	1859	1383	1470	1659	S-phase kinase-associated protein 2, E3 ubiquitin protein ligase
LOC104916523	2014	1708	1813	1415	2065	1659	mucin-2-like

TOR3A	1893	1528	1867	1695	1565	1659	torsin family 3, member A
C8H10orf2	2468	1618	2246	1566	2023	1658	chromosome 8 open reading frame, human C10orf128
ACTN1	2530	1712	2222	1640	2094	1658	actinin, alpha 1
HOOK3	1582	1504	1711	1347	1665	1657	hook microtubule-tethering protein 1
TGM2	1908	1957	1657	1814	1414	1657	transglutaminase 2
RRBP1	1768	1481	1688	1445	1635	1656	ribosome binding protein 1
LOC100539630	1617	1486	1646	1651	1605	1656	dihydropyrimidine-related protein 3
LOC104916212	1726	1715	1585	1571	1603	1655	alpha-sarcoglycan-like
MYOCD	1091	1257	1167	1574	1836	1655	myocardin
FAM207A	1372	1493	1451	1577	1597	1655	family with sequence similarity 206, member A
AFAP1L2	2176	1527	2091	1548	1864	1655	actin filament associated protein 1-like 2
RCN2	1979	1579	1905	1517	1518	1654	reticulocalbin 2, EF-hand calcium binding domain
LOC100546435	2317	1967	2134	2162	2127	1654	dedicator of cytokinesis protein 8-like
UFD1L	1809	1717	1679	1700	1711	1654	ubiquitin fusion degradation 1 like (yeast)
LOC100544471	1536	1446	1777	1660	1291	1653	arylacetamide deacetylase-like 3
NUP88	2096	1499	1867	1395	1533	1653	nucleoporin 88kDa
PCIF1	1906	1760	1788	1664	1692	1652	PDX1 C-terminal inhibiting factor 1
RER1	1878	1582	1782	1512	1505	1652	retention in endoplasmic reticulum sorting receptor 1
LOC654833	2054	1639	2007	1504	1938	1651	myosin light polypeptide 6
KCTD9	2207	1363	1947	1323	1638	1650	potassium channel tetramerization domain containing 8
TBC1D9B	1744	1456	1667	1527	1552	1650	TBC1 domain family, member 9B (with GRAM domain)
PSME4	1720	1743	1781	1862	1661	1649	proteasome (prosome, macropain) activator subunit 4
SEMA3C							sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3C
SEH1L	1691	1257	1658	1293	1649	1648	SEH1-like (S. cerevisiae)
TMEM168	1708	1509	1747	1563	1679	1647	transmembrane protein 168
LPHN2	1493	1690	1557	1735	1607	1647	latrophilin 2
SVEP1							sushi, von Willebrand factor type A, EGF and pentraxin domain containing 1
FADS1	1572	1891	1700	1824	1579	1647	Fas (TNFRSF6)-associated via death domain
LOC100551027	1780	1325	1780	1280	1703	1645	TBK1 binding protein 1
TRNT1	2284	1597	1965	1522	1699	1645	tRNA nucleotidyl transferase, CCA-adding, 1
DCBLD2	1828	1460	1855	1471	1546	1645	discoidin, CUB and LCCL domain containing 1
ANAPC4	1633	1575	1573	1620	1468	1645	anaphase promoting complex subunit 4
RALA	1699	1398	1645	1439	1468	1644	v-ral simian leukemia viral oncogene homolog A (ras related)
LAPTM4B	2005	1595	1864	1453	1512	1644	lysosomal protein transmembrane 4 alpha
ZFR	1443	1650	1673	1605	1523	1644	zinc finger RNA binding protein
CHMP1B	1656	1473	1771	1582	1355	1643	charged multivesicular body protein 1A
LOC104911272	1687	1561	1636	1511	1575	1643	uncharacterized LOC104911272
FRMD4A	2029	1812	1938	1720	1827	1643	FERM domain containing 3
DES12	1594	1323	1617	1583	1609	1642	desumoylating isopeptidase 1
EPHB1	1878	1701	1851	1640	1685	1640	EPH receptor A8
LOC104915774	2224	1620	1977	1724	2125	1640	uncharacterized LOC104915774
LSS	2021	1359	1647	1205	1301	1640	lanosterol synthase (2,3-oxidosqualene-lanosterol cyclase)
LOC100550667	1687	761	1918	1022	1467	1640	uncharacterized LOC100550667
CTSA	1773	1547	1676	1484	1702	1639	chymotrypsin-like
PPP3CB	1700	1655	1734	1619	1750	1639	protein phosphatase 3, catalytic subunit, beta isozyme
LOC100550749	1674	1516	1611	1670	1532	1639	cullin-2
STAT1	1671	1403	1669	1419	1489	1637	signal transducer and activator of transcription 1, 91kDa
PLK1	1682	1496	1600	1472	1416	1636	polo-like kinase 1
LOC100542173	2132	1339	1968	1397	1561	1635	selenoprotein O-like
SLC30A9	2132	1461	1830	1395	1728	1634	solute carrier family 30 (zinc transporter), member 9
LOC104914291	1763	1677	1559	1633	1462	1634	probable beta-D-xylosidase 2
PICALM	1560	1828	1532	1498	1584	1634	phosphatidylinositol binding clathrin assembly protein
LOC104914462	1765	1557	1803	1443	1502	1634	uncharacterized LOC104914462
NFATC3	1995	1543	1721	1470	1676	1634	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 3
DBT	1271	1311	1320	1710	1277	1634	debranching RNA lariats 1
CHMP4B	1353	1645	1415	1589	1364	1633	charged multivesicular body protein 3
JMJD1C	1811	1631	1673	1540	1579	1633	JNK1/MAPK8-associated membrane protein
FBXW4	1619	1497	1676	1728	1543	1633	F-box and WD repeat domain containing 2
ARPC4	1758	1688	1629	1575	1594	1632	actin related protein 2/3 complex, subunit 4, 20kDa
RHBDF1	1817	1658	1755	1542	1627	1632	rhomboid 5 homolog 1 (Drosophila)
PPP2R5C	2114	1560	1817	1811	1892	1631	protein phosphatase 2, regulatory subunit B', gamma
XPO7	1868	1413	1767	1614	1563	1630	exportin 7
ATG13	1855	1539	1813	1642	1699	1629	autophagy related 13
MED31	1484	1817	1677	1917	1486	1627	mediator complex subunit 31
MRPL24	1935	1584	1929	1470	1827	1627	mitochondrial ribosomal protein L24
NAA20	1970	1730	1924	1450	1840	1626	N(alpha)-acetyltransferase 20, NatB catalytic subunit
AGFG1	1579	1496	1580	1474	1577	1626	ArfGAP with FG repeats 1
HSPB2	2110	1646	1817	1730	1677	1625	heat shock protein family B (small), member 11
SS18	1463	1521	1502	1288	1445	1625	synovial sarcoma translocation, chromosome 18
ANLN	1774	1542	1702	1370	1547	1625	anillin, actin binding protein
DENR	2419	1415	2222	1403	1627	1624	DENN/MADD domain containing 6B
TPRG1L	1649	1571	1794	1377	1564	1624	tumor protein p63 regulated 1-like
TOB2	1648	1648	1658	1639	1671	1622	transducer of ERBB2, 2
VCL	1886	1775	1864	1821	1904	1622	vinculin
CTPS1	1958	1498	1790	1801	1712	1621	cystinosin, lysosomal cystine transporter
	1913	1343	1733	1397	1728		

EMILIN2	1572	1895	1628	1669	1804	1621	elastin microfibril interfacier 1
DAB2IP	1885	1619	1790	1738	1694	1621	Dab, mitogen-responsive phosphoprotein, homolog 2 (Drosophila)
ALDH1A2	1622	1009	1748	1439	1740	1620	aldehyde dehydrogenase 1 family, member A2
LOC100547917	1672	1854	1517	1569	1565	1619	alpha-actinin-4
DCUN1D5	1637	1515	1793	1919	2619	1618	DCN1, defective in cullin neddylation 1, domain containing 4
KCNJ11	1717	1724	1636	1668	1787	1618	potassium inwardly-rectifying channel, subfamily J, member 10
DCAF7	1710	1413	1734	1455	1532	1617	DDB1 and CUL4 associated factor 5
GORASP1	1689	1463	1646	1620	1882	1617	golgin, RAB6-interacting
DCUN1D4	1428	1567	1526	1545	1803	1615	DCN1, defective in cullin neddylation 1, domain containing 3
ASB15	1696	2014	1685	1622	2269	1614	ankyrin repeat and SOCS box containing 15
LOC104913812	1250	1278	1231	1970	1909	1613	uncharacterized LOC104913812
MRPS34	1805	1520	1516	1511	1721	1613	mitochondrial ribosomal protein S34
E2F1	2449	1641	1964	1293	1554	1612	DAZ interacting zinc finger protein 1-like
LOC104912412	1962	1371	1832	1329	1708	1612	protein wntless homolog
LOC104913817	1544	1300	1551	1254	1438	1611	cytochrome c oxidase assembly protein COX11, mitochondrial
PLEKHA1	1486	1547	1590	1601	1625	1611	pleckstrin homology domain containing, family A (phosphoinositide binding specific) member 1
R3HDM1	2132	1465	1786	1756	1747	1611	R3H domain containing 1
TMEM258	1811	1549	1757	1335	1630	1610	transmembrane protein 258
SH3D19	1597	1364	1579	1477	1628	1608	SH3 domain containing 19
VWA1	1943	1723	1814	1464	1776	1608	von Willebrand factor A domain containing 1
PRPSAP2	1413	1488	1484	1461	1416	1606	phosphoribosyl pyrophosphate synthetase-associated protein 2
UBE2V2	1524	1549	1572	1580	1660	1606	ubiquitin-conjugating enzyme E2 variant 2
LOC104913813	1825	1566	1696	1798	2096	1606	uncharacterized LOC104913813
GRB10	1436	1555	1586	1549	1421	1605	GRB2-related adaptor protein 2
LGI2	1034	1151	1006	1680	1473	1605	leucine-rich, glioma inactivated 1
TRAF7	1783	1556	1681	1723	1515	1603	TNF receptor-associated factor 7, E3 ubiquitin protein ligase
GPHN	903	1434	1056	1614	1329	1603	glycoprotein hormone beta 5
LOC100539565	1239	1749	1447	1958	1304	1602	supervillin-like
FAM96B	1633	1563	1598	1591	1658	1602	family with sequence similarity 96, member A
UHRF1	2362	1580	2017	1349	1409	1600	ubiquitin-like with PHD and ring finger domains 1
LOC100544245	1856	1923	1377	2959	1850	1598	exocyst complex component 6B-like
KIF23	1847	1348	1781	1389	1436	1597	kinesin family member 21B
LOC104912188	2580	1476	2328	1462	2349	1595	uncharacterized LOC104912188
NCLN	1667	1444	1589	1406	1701	1595	nicalin
LOC100545208	1680	1405	1633	1511	1523	1595	uncharacterized LOC100545207
PROS1	1775	1294	1594	1507	1529	1594	protein S (alpha)
FLVCR2	1820	1081	1855	1157	1476	1594	feline leukemia virus subgroup C cellular receptor 1
CPSF4	2094	1494	1846	1414	1553	1594	cleavage and polyadenylation specific factor 3-like
PRIM1	1531	1473	1751	1801	1610	1593	primase, DNA, polypeptide 1 (49kDa)
PCNT	1596	1421	1509	1565	1325	1592	pericentrin
MTCL1	1563	1363	1573	1648	1736	1592	microtubule crosslinking factor 1
OSBPL2	1560	1539	1514	1576	1499	1591	oxysterol binding protein-like 2
PAIP1	1695	1489	1766	1510	1405	1590	poly(A) binding protein interacting protein 1
NDUFA1	1561	2171	1508	1801	1712	1590	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 1, 7.5kDa
LOC100545217	1683	1397	1783	1406	1563	1589	band 4.1-like protein 5
HNRNP1	1740	1385	1717	1534	1511	1589	heterogeneous nuclear ribonucleoprotein K
DENND2C	1539	1346	1399	1430	2345	1589	DENN/MADD domain containing 2A
ACSF2	1226	1410	1299	1405	1653	1589	acyl-CoA synthetase family member 2
MCF2	1656	1506	1554	1628	1454	1589	MCF.2 cell line derived transforming sequence
MED6	1654	1407	1661	1501	1581	1588	mediator complex subunit 6
LOC104916302	1997	1301	2176	1558	1382	1588	uncharacterized LOC104916302
POLR1E	2061	1310	2163	1368	1727	1588	polymerase (RNA) I polypeptide E, 53kDa
POLR2C	1474	1493	1402	1391	1368	1588	polymerase (RNA) II (DNA directed) polypeptide C, 33kDa
ZNRF1	1326	1192	1259	1313	1738	1585	zinc and ring finger 1, E3 ubiquitin protein ligase
CTNND1	1711	1445	1863	1492	1603	1585	catenin, beta like 1
PRC1	2058	1447	1930	1490	1738	1584	protein regulator of cytokinesis 1
UCHL5	1849	1416	1815	1423	1590	1583	ubiquitin carboxyl-terminal hydrolase L5
CCDC88C	1534	1268	1678	1470	1734	1583	coiled-coil domain containing 88A
PARD3B	1821	1678	1757	1606	1603	1583	par-3 family cell polarity regulator beta
TSR1	1950	1558	1801	1463	1641	1581	TSR1, 20S rRNA accumulation, homolog (S. cerevisiae)
LOC100550621	1881	1508	1655	1612	1689	1578	protein DDI1 homolog 2
EXOC7	1858	1464	1695	1506	1539	1578	exocyst complex component 6
TARS	1319	1282	1784	1357	1181	1578	threonyl-tRNA synthetase
FAM162A	1400	1571	1491	1454	1672	1577	family with sequence similarity 161, member B
GTPBP1	1822	1544	1711	1515	1512	1575	general transcription factor IIIC, polypeptide 6, alpha 35kDa
RABEP1	1818	1577	1739	1555	1643	1575	rabaptin, RAB GTPase binding effector protein 1
RASA3	1500	1424	1629	1445	1583	1575	RAS p21 protein activator 3
FBXO3	1737	1396	1637	1471	1593	1574	F-box protein 28
LOC104910758	1775	1400	1732	1352	1543	1574	uncharacterized LOC104910758
TMEM9B	1591	1478	1530	1335	1404	1574	TMEM9 domain family, member B

RPA1	1996	1427	1681	1220	1406	1573	replication protein A1, 70kDa
XYLT1	2093	1615	2080	1538	1816	1573	xylosyltransferase I
ACO1	1300	1330	1295	1408	1167	1573	aconitase 1, soluble
ZNF326	1873	1319	1645	1321	1483	1572	zinc finger protein 326
PBRM1	2004	1488	1789	1529	1598	1572	polybromo 1
PHYH	1373	1342	1398	1481	1383	1572	phytanoyl-CoA 2-hydroxylase
TXNIP	1788	2503	2128	2229	2214	1571	thioredoxin interacting protein
LOC100549955	1674	1476	1804	1392	1527	1570	uncharacterized LOC100549945
ASB4	881	1369	1250	1925	1935	1570	ankyrin repeat and SOCS box containing 4
POFUT2	1639	1396	1598	1396	1559	1569	protein O-fucosyltransferase 2
BIRC2	2523	1640	2080	1438	1687	1569	baculoviral IAP repeat containing 2
SUPT6H	1820	1581	1733	1771	1745	1569	suppressor of Ty 6 homolog (S. cerevisiae)
NOC3L	1743	1414	1610	1381	1498	1568	nucleolar complex associated 3 homolog (S. cerevisiae)
RUFY3	1928	1424	1805	1386	1530	1568	RUN and FYVE domain containing 3
MRPS33	1587	1309	1573	1236	1560	1568	mitochondrial ribosomal protein S33
DLGAP5	1961	1372	1838	1452	1483	1567	discs, large (Drosophila) homolog-associated protein 4
FITM2	1218	1247	1296	1331	1582	1565	factor interacting with PAPOLA and CPSF1
PRRC1	1909	1617	1849	1362	1501	1565	proline-rich coiled-coil 1
SLC25A46	1235	1373	1460	1443	1186	1565	solute carrier family 25, member 46
PNO1	1772	1511	1756	1537	1732	1565	partner of NOB1 homolog (S. cerevisiae)
TMNT1	1493	1697	1492	1635	1593	1564	N-terminal Xaa-Pro-Lys N-methyltransferase 1
BACE1	2152	1395	2020	1231	1803	1563	beta-site APP-cleaving enzyme 1
MARK3	1817	1534	1641	1607	1595	1563	MAP/microtubule affinity-regulating kinase 3
LOC100549425	1695	1546	1704	1639	1744	1562	gap junction gamma-1 protein-like
BABAM1	1653	1602	1607	1434	1430	1561	BRISC and BRCA1 A complex member 1
MATN2	1547	1790	1669	1814	1168	1559	matrilin 2
PFDN2	1628	1741	1669	1373	1551	1559	prefoldin subunit 2
PHF6	1814	1428	1693	1454	1495	1558	PHD finger protein 6
DENND5A	1496	1459	1660	1441	1375	1558	DENN/MADD domain containing 4C
AGPAT6	1503	1556	1595	1320	1458	1558	1-acylglycerol-3-phosphate O-acyltransferase 6
WIP1	1360	1390	1588	1433	1477	1557	WD repeat domain, phosphoinositide interacting 1
DOT1L	1701	1721	1528	1913	1457	1557	dopey family member 2
FAM64A	1528	1611	1435	1508	1870	1557	family with sequence similarity 63, member B
TPD52	1771	1377	1772	1427	1670	1557	tumor protein D52
LOC104912824	1056	1565	1327	1731	1246	1556	uncharacterized LOC104912824
GOPC	1645	1544	1699	1378	1490	1556	gon-4-like (C. elegans)
FAM208A	1618	1434	1639	1505	1504	1555	family with sequence similarity 207, member A
DHX36	1804	1463	1739	1533	1609	1555	DEAH (Asp-Glu-Ala-His) box polypeptide 35
RNF19A	1388	1575	1476	1590	1407	1553	ring finger protein 19A, RBR E3 ubiquitin protein ligase
LRRC14B	1511	2142	1407	1652	1396	1553	leucine rich repeat containing 14B
ERP44	1866	1579	1793	1557	1450	1552	endoplasmic reticulum protein 29
C1H12orf4	1499	1708	1602	1391	1570	1552	chromosome 1 open reading frame, human C12orf29
ZCCHC24	1403	1469	1514	1818	1607	1552	zinc finger, CCHC domain containing 24
SURF6	1827	1498	1701	1391	1478	1551	surfeit 6
LONRF2	1782	1458	1809	1519	1687	1550	LON peptidase N-terminal domain and ring finger 2
RHOT1	1726	1466	1642	1562	1595	1550	ras homolog family member T1
SMAD3	2218	1670	2007	1539	1636	1549	SMAD family member 3
CKAP4	1918	1352	1926	1349	1551	1549	cytoskeleton associated protein 2-like
CCDC25	1518	1566	1530	1494	1467	1549	coiled-coil domain containing 186
PHAX	1456	1399	1682	1392	1232	1549	phosphorylated adaptor for RNA export
LUC7L	1401	1520	1486	1509	1417	1548	LUC7-like (S. cerevisiae)
MRPL17	1396	1644	1640	1451	1240	1547	mitochondrial ribosomal protein L17
ELMOD2	1791	1404	1716	1234	1425	1546	ELMO/CED-12 domain containing 1
LOC100539553	1398	1640	1492	2058	1338	1545	rho GTPase-activating protein 7-like
LOC100546675	1748	1533	1264	3270	1581	1545	vitamin K-dependent protein C-like
PRPF6	1726	1516	1645	1613	1512	1545	pre-mRNA processing factor 6
MYBPC3	2292	1650	1860	2463	2661	1544	myosin binding protein C, cardiac
FKBP9	1700	1424	1731	1287	1550	1544	FK506 binding protein 8, 38kDa
NCOR2	1851	1514	1796	1629	1596	1544	nuclear receptor corepressor 2
VTA1	1243	1259	1416	1394	1393	1544	vesicle (multivesicular body) trafficking 1
ABCC5							
	1382	1258	1454	1591	1348	1543	ATP-binding cassette, sub-family C (CFTR/MRP), member 5
QSER1	1781	1541	1753	1633	1476	1543	glutamine and serine rich 1
LOC100546408							
	1142	1195	1281	1741	1792	1543	malignant fibrous histiocytoma-amplified sequence 1 homolog
SIPA1L1	1447	1661	1428	1435	1190	1543	signal-induced proliferation-associated 1 like 1
NBR1	1287	1369	1491	1585	1318	1541	neighbor of BRCA1 gene 1
MTHFD2							methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 2,
	1630	1236	1959	1064	1617	1541	methylenetetrahydrofolate cyclohydrolase
LOC100545134	1788	1397	1713	1373	1484	1540	receptor-type tyrosine-protein phosphatase T
NDC1	1869	1439	1697	1272	1432	1539	NDC1 transmembrane nucleoporin
UGGT1	1765	1402	1562	1295	1405	1539	UDP-glucose glycoprotein glucosyltransferase 1
PRPF38B	1971	1425	1712	1404	1480	1538	pre-mRNA processing factor 38B
DECR1	1400	2017	1440	1619	1225	1537	DEAF1 transcription factor
LOC104916205	1239	1685	1297	1475	1255	1537	uncharacterized LOC104916205
PCNX	1771	1512	1632	1533	1560	1536	pecanex homolog (Drosophila)
RPP14	1570	1367	1480	1266	1469	1536	ribonuclease P/MRP 14kDa subunit
PIK3C2B							
	1486	1812	1481	1417	1696	1536	phosphatidylinositol-4-phosphate 3-kinase, catalytic subunit type 2 beta

NASP	2242	1550	1875	1247	1322	1535	nuclear autoantigenic sperm protein (histone-binding)
LOC100538632	1721	1955	1764	1643	2129	1534	kinesin-1 heavy chain
FAM101B	1968	1445	1920	1734	1724	1533	Fas apoptotic inhibitory molecule 2
CCDC71	1645	1324	1480	1289	1392	1532	coiled-coil domain containing 69
CPSF3	1586	1360	1590	1376	1558	1530	cleavage and polyadenylation specific factor 2, 100kDa
MAP1LC3A	1238	1600	1301	1693	1382	1528	microtubule-associated protein 1 light chain 3 alpha
LOC100544587	1395	1287	1428	1470	1296	1528	ankyrin repeat domain-containing protein 26-like
LOC100548859	1271	1660	1363	1655	1509	1526	transmembrane protease serine 11E-like
DIDO1	1513	1383	1481	1430	1555	1526	dicer 1, ribonuclease type III
LOC100546381	1221	1344	1451	1239	1092	1526	AN1-type zinc finger protein 5-like
XPA	1597	1702	1649	1447	1123	1525	xeroderma pigmentosum, complementation group A
FKBP18	1073	1326	1121	1279	1021	1524	FK506 binding protein 1A, 12kDa
VOPP1	1468	1510	1552	1302	1366	1524	vesicular, overexpressed in cancer, prosurvival protein 1
PRMT9	1644	1506	1673	1481	1466	1522	protein arginine methyltransferase 9
FBXO45	1526	1527	1451	1327	1535	1520	F-box protein 43
LOC100541229	1276	1428	1437	1663	1260	1519	netrin-4
DDX23	1796	1528	1639	1519	1460	1519	DEAD (Asp-Glu-Ala-Asp) box polypeptide 20
VPS36	1703	1357	1719	1339	1551	1518	vacuolar protein sorting 36 homolog (S. cerevisiae)
ARPC3	1645	1373	1675	1403	1463	1518	actin related protein 2/3 complex, subunit 3, 21kDa
NDUFA13	1476	1634	1502	1392	1517	1518	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 13
PDCD4	1422	1525	1681	1777	1596	1518	programmed cell death 4 (neoplastic transformation inhibitor)
FEM1C	1121	1383	1331	1496	1359	1517	fem-1 homolog b (C. elegans)
LOC104913227	1460	1272	1379	1385	1363	1516	ankyrin repeat and KH domain-containing protein 1-like
LDLRAD4	1538	1804	1534	1558	1610	1513	low density lipoprotein receptor class A domain containing 3
SMNDC1	1671	1283	1501	1283	1439	1513	survival motor neuron domain containing 1
LOC100550978	1320	1605	1380	1440	1248	1513	RUN and SH3 domain containing 2
RHOJ	1690	1751	1683	1739	1553	1513	ras homolog family member J
XRN1	1429	1462	1485	1503	1362	1511	5'-3' exoribonuclease 1
PCYT2	1695	1487	1537	1316	1431	1510	phosphate cytidyltransferase 2, ethanolamine
RTFDC1	1711	1487	1690	1514	1529	1510	replication termination factor 2 domain containing 1
FAM134A	1626	1584	1494	1520	1630	1510	family with sequence similarity 133, member B
LMAN2L	1545	1399	1463	1244	1445	1509	lectin, mannose-binding 2
ACVR1	1884	1423	1755	1411	1567	1509	activin A receptor, type I
NTSC1A	1938	1618	1453	1635	1398	1508	5'-nucleotidase, cytosolic 1A
EEF1E1	1534	1248	1464	1458	1470	1508	eukaryotic translation elongation factor 1 delta (guanine nucleotide exchange protein)
LOC100539849	2143	1672	1814	1609	1559	1507	zinc finger MYM-type protein 3-like
NAA16	1577	1580	1668	1787	1591	1507	N(alpha)-acetyltransferase 16, NatA auxiliary subunit
ATAD3A	1662	1183	1485	1234	1259	1506	ATPase family, AAA domain containing 3A
MCM3AP	1715	1709	1612	1521	1835	1505	minichromosome maintenance complex component 3 associated protein
LOC104915292	1295	1458	1509	1287	1180	1505	hydroxysteroid dehydrogenase-like protein 2
CIZ1	1926	1383	1662	1276	1476	1505	Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 4
TPM4	2002	1398	1868	1130	1729	1504	tropomyosin 4
SLC25A28	1370	1553	1366	1483	1401	1503	solute carrier family 25 (mitochondrial iron transporter), member 28
UBE2Q2	1634	1434	1637	1649	1554	1503	ubiquitin-conjugating enzyme E2Q family member 2
SUFU	1838	1470	1707	1514	1535	1502	suppressor of fused homolog (Drosophila)
GUSB	2037	1431	1644	1205	1338	1501	GULP, engulfment adaptor PTB domain containing 1
ABL1	1817	1489	1621	1454	1535	1498	ABL proto-oncogene 1, non-receptor tyrosine kinase
TFG	1810	1427	1581	1491	1474	1498	TRK-fused gene
ZDHH9	1573	1669	1462	1551	1441	1498	zinc finger, DHH-type containing 9
CRTAP	2188	1519	2067	1303	1558	1498	cytotoxic and regulatory T cell molecule
CRKL	1554	1555	1590	1372	1626	1497	v-crk avian sarcoma virus CT10 oncogene homolog
VPS29	1797	1444	1757	1329	1558	1496	vacuolar protein sorting 29 homolog (S. cerevisiae)
TWF1	2198	1369	1793	1499	1902	1496	twinfilin actin-binding protein 1
VMA21	1578	1422	1618	1362	1476	1495	VMA21 vacuolar H+-ATPase homolog (S. cerevisiae)
RAP2C	1833	1377	1555	1332	1504	1494	RAP2C, member of RAS oncogene family
TYW5	1525	1590	1465	1547	1390	1494	tRNA-gammaW synthesizing protein 5
MRPS26	1805	1492	1589	1281	1505	1493	mitochondrial ribosomal protein S26
RFC4	1773	1601	1620	1288	1458	1493	replication factor C (activator 1) 4, 37kDa
KIF2C	1976	1369	1790	1329	1350	1493	kinesin family member 2B
LOC104913057	1556	1465	1494	1254	1403	1493	uncharacterized LOC104913057
LOC100551394	1521	2406	1381	2022	1365	1492	protein phosphatase 1 regulatory subunit 1A-like
ADAM23	1212	1636	1215	1732	1142	1491	ADAM metalloproteinase domain 23
LOC100544107	1138	1639	990	1246	1450	1491	WD repeat and SOCS box-containing protein 1
HSPA14	1385	1207	1443	1166	1267	1491	heat shock protein 70kDa family, member 13
LPCAT3	1497	1076	1287	1145	1648	1490	lysophosphatidylcholine acyltransferase 3
WAPAL	1587	1481	1637	1605	1558	1489	wings apart-like homolog (Drosophila)
NUSAP1	1703	1315	1703	1315	1262	1489	nucleolar and spindle associated protein 1
CFAP36	1594	1417	1497	1227	1414	1489	cilia and flagella associated protein 221
LOC104914332	2040	1539	1831	1530	1623	1489	microtubule-actin cross-linking factor 1-like
UBAC1	1419	1534	1421	1804	1610	1489	UBA domain containing 1
AKT1	1748	1299	1711	1330	1488	1488	v-akt murine thymoma viral oncogene homolog 1
STK17A	1692	991	1816	1097	1284	1488	serine/threonine kinase 17a
PPP2R5D	1770	1369	1568	1306	1459	1488	protein phosphatase 2, regulatory subunit B', delta

ADAMTS1	2066	1502	1645	1406	970	1485	ADAM metallopeptidase with thrombospondin type 1 motif, 1
LOC104912283	1783	1370	1662	1265	1521	1485	uncharacterized LOC104912283
ASH2L	1578	1416	1488	1431	1378	1484	ash2 (absent, small, or homeotic)-like (Drosophila)
NOP16	1541	1319	1536	1340	1509	1484	NOP16 nucleolar protein
LOC100539623	1730	1680	1627	1403	1560	1484	unconventional prefoldin RPB5 interactor-like
LDHD	1364	1719	1403	1488	1689	1483	lactate dehydrogenase C
MCCC1	1198	1451	1109	1262	1074	1483	methylcrotonoyl-CoA carboxylase 1 (alpha)
NDUF82							
	1223	1543	1212	1245	1451	1483	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 2, 8kDa
WFS1	1245	1604	1250	1268	1263	1482	Wolfram syndrome 1 (wolframin)
FBXW5	1614	1331	1464	1421	1639	1481	F-box and WD repeat domain containing 4
PI4KB	2104	1716	1843	1660	1721	1481	phosphatidylinositol 4-kinase, catalytic, beta
EIF4G3	2006	1483	1663	1502	1696	1481	eukaryotic translation initiation factor 4 gamma, 2
ABHD17A	1821	1511	1589	1377	1665	1480	abhydrolase domain containing 17A
ZNF821	1434	1454	1369	1449	1503	1480	zinc finger protein 821
HN1	2061	1308	1836	1309	1581	1480	H6 family homeobox 3
LGALS1							
	2271	1952	2022	1219	1372	1479	LFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase
STRADA	1474	1347	1450	1323	1482	1479	STE20-related kinase adaptor alpha
MED29	1484	1489	1446	1248	1503	1479	mediator complex subunit 29
NR1H3	1719	1230	1588	1271	1514	1477	nuclear receptor subfamily 1, group H, member 3
SLC2A8							
	1407	1429	1470	1336	1238	1477	solute carrier family 2 (facilitated glucose transporter), member 8
HYPK	1416	1675	1412	1335	1384	1476	hypoxia up-regulated 1
SYCP3	1486	1589	1355	1639	1267	1475	synaptonemal complex protein 3
LOC100539530	1552	1506	1479	1478	1369	1474	uncharacterized LOC100539521
MRPL13	1402	1492	1409	1402	1302	1472	mitochondrial ribosomal protein L13
RIN2	1383	1392	1477	1539	1379	1471	Ras and Rab interactor 2
NAA25	1614	1316	1486	1342	1419	1471	N(alpha)-acetyltransferase 25, NatB auxiliary subunit
BTAF1	1620	1433	1561	1498	1605	1471	brain-specific homeobox
NAT9	1314	1265	1388	1168	1249	1471	N-acetyltransferase 9 (GCN5-related, putative)
ATP6V1E1	1216	1225	1278	1318	1319	1470	ATPase, H+ transporting, lysosomal 31kDa, V1 subunit E1
SDAD1	1668	1171	1535	1134	1257	1470	SDA1 domain containing 1
SALL4	1789	1543	1686	1453	1627	1469	spalt-like transcription factor 4
RBFOX2	1101	1138	1248	1338	1338	1469	RNA binding protein, fox-1 homolog (C. elegans) 2
ANKRD13C	1688	1495	1572	1315	1540	1469	ankyrin repeat domain 13C
ALDH3A2	1726	1418	1642	1362	1472	1468	aldehyde dehydrogenase 3 family, member A2
SBF1	1965	1531	1837	1523	1642	1467	SET binding factor 1
CDK17	1479	1418	1606	1457	1476	1467	cyclin-dependent kinase 15
ALDH1A3	1689	1016	1380	1383	1459	1466	aldehyde dehydrogenase 1 family, member A3
METAP1	1703	1126	1591	1218	1394	1466	methionyl aminopeptidase 1
PPM1A	2220	1795	2091	1652	1578	1466	protein phosphatase, Mg2+/Mn2+ dependent, 1A
ATGA4	1423	1506	1418	1479	1306	1465	autophagy related 4A, cysteine peptidase
DNAJC11	1530	1325	1456	1283	1341	1465	DnaJ (Hsp40) homolog, subfamily C, member 10
GPAM	1643	1155	1569	1271	1627	1462	GPALPP motifs containing 1
MAP4K4	1640	1201	1612	1534	1424	1461	mitogen-activated protein kinase kinase kinase kinase 4
LOC100547687	1574	1546	1561	1444	1489	1460	actin-related protein 10
SECISBP2L	1483	1514	1547	1594	1414	1460	SECIS binding protein 2-like
YY1	1845	1384	1681	1336	1522	1460	YY1 transcription factor
KIF4A	1923	1280	1804	1263	1307	1460	kinesin family member 3C
DRG1	1846	1400	1679	1319	1465	1459	dopamine receptor D5
PDSS2	1461	1238	1470	1348	1471	1458	prenyl (decaprenyl) diphosphate synthase, subunit 2
HDAC7	1668	1507	1601	1362	1550	1458	histone deacetylase 4
WNK1	1525	1579	1610	1696	1583	1457	WNK lysine deficient protein kinase 1
TOM1	941	1864	994	1772	950	1456	target of myb1 (chicken)
EYA3	1684	1358	1458	1321	1426	1456	EYA transcriptional coactivator and phosphatase 2
ANKRD13A	1700	1439	1613	1403	1445	1456	ankyrin repeat domain 13A
AGO4	1641	1429	1612	1428	1523	1456	argonaute RISC catalytic component 4
LOC100549354	1607	1257	1489	1371	1452	1455	activating signal cointegrator 1 complex subunit 3
CTSL	1261	1445	1459	1716	1536	1454	cathepsin K
LOC100547350	2215	1952	1926	1766	1716	1454	probable global transcription activator SNF2L2
ARIH2	1612	1410	1469	1459	1654	1454	ariadne RBR E3 ubiquitin protein ligase 2
TRAPPC3	1600	1413	1514	1323	1344	1453	trafficking protein particle complex 3
MFAP3	1398	1326	1391	1315	1350	1453	microfibrillar-associated protein 3
TRIM8	1862	1267	1665	1209	1565	1452	tripartite motif containing 8
SPEN	1790	1492	1584	1681	1555	1452	spen family transcriptional repressor
IGFN1	329	1019	798	1115	1024	1452	insulin-like growth factor binding protein 7
TRMT61A	1505	1039	1550	1172	1538	1452	tRNA methyltransferase 61A
DDX42	1529	1303	1498	1286	1397	1451	DEAD (Asp-Glu-Ala-Asp) box polypeptide 41
CHAMP1	1761	1505	1686	1376	1398	1450	chromatin assembly factor 1, subunit B (p60)
RBM12	1787	1471	1696	1369	1476	1448	RNA binding motif protein 12
SUCO	1529	1287	1605	1299	1372	1448	SUN domain containing ossification factor
MAN1A2	1517	1419	1522	1466	1530	1448	mannosidase, alpha, class 1A, member 2
LOC104909942	1623	1382	1529	1490	1787	1447	uncharacterized LOC104909942
UCHL3							
	1556	1165	1497	1262	1420	1445	ubiquitin carboxyl-terminal esterase L3 (ubiquitin thiolesterase)
LOC104915823	1544	1277	1461	1278	1263	1444	histone H2A.V-like
LOC100550859	1571	1355	1423	1268	1308	1444	vacuolar protein sorting-associated protein 8 homolog

MRPL16	1357	1477	1372	1246	1379	1444	mitochondrial ribosomal protein L16
ARHGAP40	1381	1262	1604	1124	1241	1444	Rho GTPase activating protein 40
LOC104912787	1260	1623	1354	1646	1357	1443	talin-2-like
FAM199X	1540	1287	1480	1256	1423	1443	family with sequence similarity 198, member B
DAD1	1558	1614	1521	1248	1266	1441	dishevelled-binding antagonist of beta-catenin 2
LOC104917189	1391	1556	1485	1713	1448	1441	uncharacterized LOC104917189
FBXO40	835	1194	1056	1364	1498	1440	F-box protein 4
HERPUD2							homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1
VPS37B	1483	1411	1519	1379	1490	1440	vacuolar protein sorting 37 homolog B (S. cerevisiae)
MFSD11	1616	1444	1587	1685	1711	1438	major facilitator superfamily domain containing 11
GOLIM4	1333	1381	1416	1428	1429	1438	golgin B1
NGLY1	1601	1273	1543	1548	1662	1438	N-glycanase 1
LOC100539819	1197	1203	1219	1251	1164	1437	uncharacterized LOC100539818
SASH1	1352	1835	1523	1773	1343	1437	SAM and SH3 domain containing 1
SIN3B	1453	1239	1548	1438	1463	1436	SIN3 transcription regulator family member B
SCYL3	1398	1394	1364	1475	1461	1436	SCY1-like 3 (S. cerevisiae)
NDUFS8	1353	1399	1343	1622	1531	1435	NADH dehydrogenase (ubiquinone) Fe-S protein 8, 23kDa (NADH-coenzyme Q reductase)
CHUK	1400	1623	1352	1466	1454	1435	chromatin target of PRMT1
LOC104914706	1484	1306	1343	1312	1382	1435	PWWP domain-containing protein MUM1
SLC31A1	1833	1397	1622	1208	1356	1435	solute carrier family 31 (copper transporter), member 1
AARSD1	1476	1254	1235	1111	1263	1434	alanine-tRNA synthetase domain containing 1
USP19	1437	1692	1449	1527	1319	1434	ubiquitin specific peptidase 19
OTUD4	1423	1485	1305	1508	1416	1433	OTU deubiquitinase 4
LOC100547331	1521	1312	1474	1409	1413	1433	EVIS-like protein
TMBIM1	1299	1413	1221	1401	1183	1433	transmembrane BAX inhibitor motif containing 1
GPR158	1553	1918	1603	1760	1410	1433	G protein-coupled receptor 157
MICU1	1223	1012	1240	1280	1077	1433	mitochondrial calcium uptake 1
EFHD1	1178	1511	1236	1380	1219	1433	EF-hand domain (C-terminal) containing 1
ATOX1	1909	1381	1593	1447	1331	1432	antioxidant 1 copper chaperone
CREM	1399	1530	1347	1405	1389	1432	cysteine-rich with EGF-like domains 2
NIFK	1154	1349	1206	1613	1642	1432	nucleolar protein interacting with the FHA domain of MKI67
LOC104909786	1586	1349	1539	1295	1402	1432	uncharacterized LOC104909786
LOC104911584	1385	915	1491	1385	1829	1431	N-acetylglucosamine-1-phosphotransferase subunits alpha/beta-like
SSU72	1408	1436	1408	1261	1117	1431	SSU72 RNA polymerase II CTD phosphatase homolog (S. cerevisiae)
ACYP2	1562	1457	1468	1264	1338	1430	acylphosphatase 2, muscle type
ZNF367	1164	1363	1319	1429	1688	1428	zinc finger protein 367
ROCK1	1496	1226	1555	1104	1031	1428	Rho-associated, coiled-coil containing protein kinase 1
FNTA	1665	1362	1618	1441	1477	1427	folliculin interacting protein 2
PNRC1	1373	1370	1471	1247	1138	1427	proline-rich nuclear receptor coactivator 1
YPEL1	1329	1455	1425	1986	1462	1425	yippee-like 1 (Drosophila)
STARD9	991	1243	1269	1797	1256	1424	StAR-related lipid transfer (START) domain containing 9
LOC104915853	1262	1442	1221	1619	1357	1423	spore wall protein 2-like
UBQLN4	1457	1386	1329	1320	1977	1423	ubiquitin 4
ZBTB33	1809	1466	1637	1558	1604	1421	zinc finger and BTB domain containing 33
CKB	1496	1418	1414	1427	1493	1421	cytoskeleton-associated protein 4
DNAJC18	1685	1335	1364	1231	1415	1420	DnaJ (Hsp40) homolog, subfamily C, member 17
LOC104911723	1359	1468	1448	1361	1335	1420	E3 ubiquitin-protein ligase UBR3-like
CTCF	1359	1523	1430	1632	1434	1419	CTS telomere maintenance complex component 1
SYNC	1573	1287	1535	1310	1385	1418	syncoilin, intermediate filament protein
PCGF3	1356	1682	1377	1592	1707	1417	polycomb group ring finger 3
UBE2F	1177	1271	1285	1245	1103	1417	ubiquitin-conjugating enzyme E2F (putative)
MRC2	1278	1453	1401	1397	1345	1417	mannose receptor, C type 2
MORC2	1615	1373	1573	1472	2022	1417	MORC family CW-type zinc finger 2
DIABLO	1938	1390	1662	1496	1568	1416	DEAH (Asp-Glu-Ala-His) box helicase 9
TMEM115	1494	1227	1298	1178	1332	1416	transmembrane protein 115
ZNF598	1651	1446	1518	1380	1540	1415	zinc finger protein 598
FGFR1OP2	1598	1309	1457	1376	1423	1415	FGFR1 oncogene partner
PSMB3	1525	1290	1441	1259	1489	1415	proteasome (prosome, macropain) subunit, beta type, 3
DHDDS	1609	1320	1604	1172	1338	1414	24-dehydrocholesterol reductase
HTATSF1	1614	1400	1446	1386	1439	1412	HIV-1 Tat interactive protein 2, 30kDa
COG4	1354	1352	1424	1279	1270	1412	component of oligomeric golgi complex 3
CD34	1413	1269	1341	1157	1365	1411	CD320 molecule
GOLPH3	1577	1360	1663	1263	1693	1411	golgi membrane protein 1
OLFML3	1333	1276	1466	1225	1215	1411	olfactomedin-like 3
DNAJB12	2200	1642	1781	1234	1281	1411	DnaJ (Hsp40) homolog, subfamily B, member 11
EMC7	1581	1414	1464	1375	1515	1411	ER membrane protein complex subunit 6
LOC100303673	1367	1303	1415	1327	1374	1411	hepatocyte growth factor activator
PCID2	1352	990	1580	1251	1410	1410	PCI domain containing 2
CSNK1D	1607	1236	1596	1253	1232	1410	casein kinase 1, alpha 1
PSEN2	1533	1294	1453	1315	1421	1409	presenilin 2
PFDN4	1439	1332	1505	1437	1655	1409	prefoldin subunit 4
GLRX2	1464	1318	1561	1526	1401	1408	glutaredoxin (thioltransferase)
LOC104912363	1516	1392	1550	1450	1577	1408	formin-binding protein 1-like
	1726	1412	1571	1453	1401	1408	

ERGIC3	1310	1205	1448	1140	1283	1408	endoplasmic reticulum-golgi intermediate compartment (ERGIC) 1
EXOC3	1213	1390	1266	1509	1339	1408	exocyst complex component 2
FZD4	1570	1560	1399	1517	1372	1408	frizzled class receptor 3
LOC100547618	1704	1596	1526	1502	1697	1407	T-box transcription factor TBX3-like
LOC104913572	1286	1527	1325	1868	1471	1407	unconventional myosin-XVIIIb-like
CDIP1	1465	1544	1345	1470	1440	1406	cadherin-related family member 5
UPF3B	1485	1406	1407	1376	1488	1406	UPF3 regulator of nonsense transcripts homolog B (yeast)
MAR6	1410	1325	1452	1421	1596	1405	membrane-associated ring finger (C3HC4) 6, E3 ubiquitin protein ligase
NDUFA7	1314	1588	1308	1336	1292	1405	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 7, 14.5kDa
CLK3	1299	1367	1248	1362	1378	1404	CDC-like kinase 2
LOC100539048	1328	1125	1427	1549	1869	1404	pepsin A
SNRPF	1654	1303	1603	1030	1234	1404	small nuclear ribonucleoprotein polypeptide F
SARS	1482	1525	1555	1534	1379	1403	seryl-tRNA synthetase
KCTD3	1504	1776	1386	1696	1452	1403	potassium channel tetramerization domain containing 21
RNF141	1380	1316	1346	1385	1395	1403	ring finger protein 141
WDR3	1657	1244	1389	1160	1382	1402	WD repeat domain 3
WAC	1720	1348	1491	1603	1472	1402	WW domain containing adaptor with coiled-coil
SNRPE	1686	1345	1592	1141	1286	1402	small nuclear ribonucleoprotein polypeptide E
MLX	1549	1357	1555	1358	1312	1402	MLX, MAX dimerization protein
PAFAH1B2	1798	1340	1570	1200	1409	1401	platelet-activating factor acetylhydrolase 1b, catalytic subunit 2 (30kDa)
MCUR1	1519	1141	1404	1222	1389	1401	mitochondrial calcium uniporter regulator 1
SF3A3	1680	1372	1594	1203	1366	1399	splicing factor 3a, subunit 3, 60kDa
FOXM1	1628	1293	1426	1202	1113	1399	forkhead box L2
MBNL2	1120	1389	1328	1279	1354	1399	muscleblind-like splicing regulator 2
IFT52	1471	1218	1424	1303	1215	1399	intraflagellar transport 46
BAZ1A	1862	1404	1632	1359	1439	1399	bromodomain adjacent to zinc finger domain, 1A
MTMR1	1597	1354	1507	1280	1344	1398	myotubularin related protein 1
GART	1223	1295	1275	1350	1154	1398	glycyl-tRNA synthetase
GABARAPL1	1489	1415	1433	1460	1354	1397	GRB2-associated binding protein 3
KIRREL	1856	1484	1482	1196	1440	1396	Kin17 DNA and RNA binding protein
EIF4B	1574	1452	1450	1397	1390	1396	eukaryotic translation initiation factor 4A3
YTHDF3	1170	1606	1264	1695	1149	1395	YTH N(6)-methyladenosine RNA binding protein 3
LYSMD2	1531	1322	1495	1277	1427	1394	LysM, putative peptidoglycan-binding, domain containing 2
UTP20	1773	1170	1515	1218	1365	1394	UTP20, small subunit (SSU) processome component, homolog (yeast)
LOC100551372	1665	1264	1421	1146	1373	1393	ephrin-B1
LOC100550906	1461	1319	1484	1201	1619	1393	putative methyltransferase DDB_G0268948
MTMR9	1452	1252	1447	1189	1264	1393	myotubularin related protein 9
GTF2F2	1661	999	1418	989	1107	1392	general transcription factor IIE, polypeptide 2, beta 34kDa
MMD	1619	1082	1478	1204	1415	1391	monocyte to macrophage differentiation-associated
MRPS23	1458	1486	1452	1482	1471	1391	mitochondrial ribosomal protein S23
SRI	1518	1481	1585	1351	1318	1390	sorcin
LOC100548330	1756	1100	1585	1093	1439	1389	folate receptor alpha-like
TLK2	1665	1385	1548	1427	1490	1388	tousled-like kinase 2
MED13L	1593	1425	1598	1488	1342	1388	mediator complex subunit 13-like
SHC1	1700	1312	1543	1275	1488	1388	SHC (Src homology 2 domain containing) transforming protein 1
ADAMTS2	1555	1579	1531	1711	1465	1387	ADAM metalloproteinase with thrombospondin type 1 motif, 2
EPS15	1301	1232	1430	1507	1386	1384	glutamyl-prolyl-tRNA synthetase
AHCTF1	1653	1298	1508	1303	1253	1384	AT hook containing transcription factor 1
C1H12orf57	1474	1764	1461	1361	1556	1384	chromosome 1 open reading frame, human C12orf50
KIF11	1695	1157	1607	1264	1167	1383	kinase D-interacting substrate, 220kDa
NOL11	1534	1371	1524	1336	1348	1383	nucleolar protein 11
CLK4	1334	1392	1309	1373	1354	1382	CDC-like kinase 3
SNX2	1331	1238	1430	1238	1017	1382	sorting nexin 2
LOC104915827	1385	1554	1325	1706	1569	1382	plectin-like
DPAGT1	1502	1442	1440	1354	1424	1381	DOT1-like histone H3K79 methyltransferase
CBR1	1271	1246	1357	1299	1274	1380	cerebellin 4 precursor
ALKBH5	1024	1380	1029	1353	1665	1380	AlkB family member 5, RNA demethylase
ARPP21	1309	1121	1309	1345	1038	1380	cAMP-regulated phosphoprotein, 21kDa
BACH1	1354	1446	1330	1874	1306	1380	BTB and CNC homology 1, basic leucine zipper transcription factor 1
COPG2	1504	1301	1384	1297	1344	1380	coatamer protein complex, subunit gamma 1
DNAJB2	1833	1527	1685	1582	2040	1379	DnaJ (Hsp40) homolog, subfamily B, member 14
AK6	1383	1186	1502	1226	1108	1378	adenylate kinase 6
TARSL2	1293	1118	1330	1028	1293	1378	threonyl-tRNA synthetase-like 2
ALG12	1736	1200	1544	1224	1443	1377	ALG12, alpha-1,6-mannosyltransferase
EMP2	1392	1237	1582	1378	1522	1377	epithelial membrane protein 1
CENPE	1797	1212	1714	1294	1228	1376	centromere protein C
MRPS2	1198	1518	1354	1562	1259	1376	mitochondrial ribosomal protein S2
ARGLU1	1475	1382	1381	1417	1343	1376	arginine and glutamate rich 1
LOC104913011	994	1133	1079	1625	1483	1375	phosphorylase b kinase regulatory subunit beta-like
SCAMP2	1431	1295	1400	1166	1433	1375	secretory carrier membrane protein 2

ACTR6	1745	1304	1557	1226	1257	1375	ARP6 actin-related protein 6 homolog (yeast)
LOC100539772	1448	1369	1351	1367	1400	1374	catenin alpha-3
FYTTD1	1591	1276	1547	1423	1291	1374	FYVE and coiled-coil domain containing 1
HIF1AN							hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)
TM6SF1	1373	1328	1337	1273	1400	1374	transmembrane 6 superfamily member 1
CORO1C	1537	1984	1539	1654	1268	1374	coronin, actin binding protein, 1B
PRKAG3	1772	1242	1614	1202	1324	1373	
	852	965	1090	1319	1833	1373	protein kinase, AMP-activated, gamma 3 non-catalytic subunit
RALGDS	1159	1178	1263	1296	1383	1373	ral guanine nucleotide dissociation stimulator
LOC100548787	1047	1551	1153	1575	1346	1372	glycosylated lysosomal membrane protein
VPS4B	1431	1219	1472	1236	1332	1369	vacuolar protein sorting 4 homolog B (S. cerevisiae)
GOLGA4	1301	1284	1334	1544	1255	1368	golgin A3
TMEM237	1423	1294	1428	1324	1262	1368	transmembrane protein 237
UTP11L	2208	1423	1940	1206	1633	1367	UTP11-like, U3 small nucleolar ribonucleoprotein (yeast)
PRKAB2							
	1153	1465	1063	1681	1434	1366	protein kinase, AMP-activated, beta 2 non-catalytic subunit
PTBP1	1723	1193	1591	1080	1370	1365	polypyrimidine tract binding protein 1
LOC100549389	1729	1335	1573	1314	1338	1364	zinc finger protein 423-like
LOC104911920	1039	1431	1229	1317	1357	1364	uncharacterized LOC104911920
SDK2	1976	1483	1707	1217	1194	1363	sidekick cell adhesion molecule 2
SMO	1713	1421	1601	1415	1492	1363	smoothened, frizzled class receptor
CDAN1	1340	1240	1239	1385	1353	1363	cytidine and dCMP deaminase domain containing 1
RBX1	1468	1589	1485	1300	1342	1363	ring-box 1, E3 ubiquitin protein ligase
BMS1	1606	1211	1501	1210	1277	1363	BMS1 ribosome biogenesis factor
TAOK1	1654	1340	1591	1460	1298	1362	TAO kinase 1
ROCK2	1806	1561	1810	1568	1561	1360	Rho-associated, coiled-coil containing protein kinase 2
PSMD9							
	1430	1320	1339	1147	1259	1360	proteasome (prosome, macropain) 26S subunit, non-ATPase, 9
VPS11	1254	1245	1251	1247	1151	1358	vacuolar protein sorting 11 homolog (S. cerevisiae)
ADPRHL2	1385	1429	1332	1293	1299	1358	ADP-ribosylhydrolase like 2
VPS45	1283	1313	1229	1232	1113	1357	vacuolar protein sorting 45 homolog (S. cerevisiae)
PDPR	1389	1246	1245	1184	1341	1357	pyruvate dehydrogenase phosphatase regulatory subunit
TIMM50							
	1350	1295	1358	1041	1095	1356	translocase of inner mitochondrial membrane 50 homolog (S. cerevisiae)
CXXC5	1474	1383	1426	1352	1392	1356	chemokine (C-X-C motif) receptor 5
DYNLRB1	1357	1396	1416	1267	1283	1355	dynein, light chain, LC8-type 2
LY86	983	1448	1115	1384	971	1355	lymphocyte antigen 86
DHX37	1614	1154	1380	1034	1342	1354	DEAH (Asp-Glu-Ala-His) box polypeptide 36
LOC104911950	1336	1101	1307	1740	1487	1354	uncharacterized LOC104911950
GOLGA7	1522	1356	1477	1247	1269	1353	golgin A5
PAK2	1596	1304	1494	1360	1411	1353	p21 protein (Cdc42/Rac)-activated kinase 2
LOC100539002	1335	1218	1464	1408	1303	1353	uncharacterized protein F13E9.13, mitochondrial-like
IRF2BP2	1132	1323	1304	1345	1183	1353	interferon regulatory factor 2
PSMD5							
	1628	1323	1539	1239	1344	1353	proteasome (prosome, macropain) 26S subunit, non-ATPase, 5
GINM1	1159	1309	1344	1355	1309	1352	gypsy retrotransposon integrase 1
WBP2NL	1538	1434	1420	1267	1465	1352	WBP2 N-terminal like
PIGX	1507	1559	1528	1409	1464	1352	phosphatidylinositol glycan anchor biosynthesis, class X
TIE1							
	1780	1456	1600	1370	1608	1352	tyrosine kinase with immunoglobulin-like and EGF-like domains 1
SNRPD1	1847	1219	1600	1073	1216	1350	small nuclear ribonucleoprotein D1 polypeptide 16kDa
TRPC1							
	1427	1421	1411	1349	1326	1350	transient receptor potential cation channel, subfamily C, member 1
GSTA1.3	1379	1104	1276	1041	1201	1350	glutathione S-transferase alpha class A1.1
TP53BP1	1524	1303	1476	1292	1345	1349	tumor protein p53 binding protein 1
LOC104909369	1200	1366	1285	1441	1428	1349	uncharacterized LOC104909369
CD81	1750	1578	1536	1453	1383	1348	CD80 molecule
KLF6	1305	1314	1371	1370	1113	1347	Kruppel-like factor 5 (intestinal)
IDH1	1475	1284	1523	1350	1460	1346	insulin-degrading enzyme
ERCC3	1528	1194	1338	1169	1184	1345	ELKS/RAB6-interacting/CAST family member 2
KIAA1429	1296	1276	1378	1359	1276	1345	KIAA1407 ortholog
SLC25A29							solute carrier family 25 (mitochondrial carnitine/acylcarnitine carrier), member 29
	901	1219	1023	1641	1216	1343	member 29
OLFML2B	1522	1533	1559	1203	1522	1343	olfactomedin-like 2B
SPEG	1422	1450	1223	1490	1544	1343	SPEG complex locus
SLC35B1	1581	1221	1379	1130	1269	1342	solute carrier family 35, member B1
SMARCA5							SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 5
MRPL14	2183	1336	1796	1202	1387	1341	mitochondrial ribosomal protein L14
ABRA	1396	1242	1368	1242	1346	1341	actin-binding Rho activating protein
PPP1R3C	1765	2138	1906	1630	962	1340	protein phosphatase 1, regulatory subunit 3C
CLK1	897	1018	1003	1005	1079	1340	
	1408	1305	1221	1186	1190	1340	CAP-GLY domain containing linker protein family, member 4
OIP5	1338	1441	1388	1272	1212	1338	Opa interacting protein 5
NUP54	1509	1324	1392	1255	1265	1338	nucleoporin 54kDa
PI15	1592	1892	1812	1786	1355	1338	peptidase inhibitor 15
LOC100542241	1528	1282	1518	1464	1443	1338	rhophilin-2-like
TANK	1527	1148	1418	1259	1348	1338	TRAF family member-associated NFkB activator

PHLDB1	1506	1483	1416	1263	1311	1337	pleckstrin homology-like domain, family B, member 1
CDC44	1459	1274	1464	1147	1171	1336	cell division cycle associated 3
CD36	1323	2051	1442	1661	974	1335	CD34 molecule
PPM1L	1034	2096	1207	2106	1240	1335	protein phosphatase, Mg2+/Mn2+ dependent, 1L
CSNK2A2	1821	1352	1538	1328	1437	1335	casein kinase 2, alpha 1 polypeptide
LOC104912776							
	1543	1392	1489	1326	1396	1335	disintegrin and metalloproteinase domain-containing protein 10-like
ENSA	1228	1428	1318	1406	1341	1335	ectonucleotide pyrophosphatase/phosphodiesterase 7
LOC100548251	1429	1105	1318	1039	1129	1335	protein CXorf40A-like
SH3PXD2A	1301	1288	1394	1556	1249	1334	SH3 and PX domains 2A
LOC100543159	1470	1171	1457	1119	1342	1334	uncharacterized LOC100543157
FKBP7	1584	1347	1545	1222	1253	1334	FK506 binding protein 6, 36kDa
LOC104911484	1415	1299	1331	1212	1278	1333	uncharacterized LOC104911484
RPTOR	1529	1268	1359	1216	1346	1333	regulatory associated protein of MTOR, complex 1
HIAT1	1548	1135	1388	1150	1298	1333	HERV-H LTR-associating 2
APBP2							
	1519	1325	1579	1374	1417	1333	amyloid beta precursor protein (cytoplasmic tail) binding protein 2
DGCR2	1290	1324	1222	1225	1336	1332	DiGeorge syndrome critical region gene 14
SLC30A5	1376	1225	1524	1120	1107	1332	solute carrier family 30 (zinc transporter), member 5
SMIM14	1417	1368	1422	1226	1386	1331	small integral membrane protein 14
CD74	1766	961	1668	1301	1985	1331	CD7 molecule
AURKAIP1	1574	1328	1578	1282	1383	1331	aurora kinase A interacting protein 1
CTNBL1	1631	1407	1505	1340	1353	1331	catenin, beta interacting protein 1
MYO1B	1468	1119	1604	1179	1296	1331	myosin IB
NUDT3							
	1066	1434	1069	1197	1346	1331	nudix (nucleoside diphosphate linked moiety X)-type motif 3
LOC104909210	1258	1114	1462	1161	1122	1330	E3 ubiquitin-protein ligase KCMF1-like
AHSA2							
	1394	1215	1288	1212	1249	1329	AHA1, activator of heat shock 90kDa protein ATPase homolog 2 (yeast)
LOC100542445	1517	1199	1400	1219	1241	1329	histone-lysine N-methyltransferase SETMAR
LEO1	1515	1186	1359	1179	1348	1328	leukocyte receptor cluster (LRC) member 8
MRPL21	1418	1175	1451	1145	1416	1328	mitochondrial ribosomal protein L21
KIF3A	958	988	1106	1237	981	1328	kinesin family member 2C
SASS6	1508	1238	1442	1220	1207	1327	spindle assembly 6 homolog (C. elegans)
LOC104911095	1515	1289	1427	1463	1596	1327	uncharacterized LOC104911095
UBQLN1	1579	1072	1540	1113	1161	1327	ubiquilin 1
SCYL2	1466	1279	1427	1380	1343	1327	SCY1-like 2 (S. cerevisiae)
ARL1	1379	1318	1332	1062	1160	1325	ADP-ribosylation factor-like 1
AKAP17A	1385	1218	1291	1185	1290	1325	A kinase (PRKA) anchor protein 17A
YWHAG							tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation
	1406	1229	1363	1289	1355	1325	protein, gamma
HDAC9	1099	1474	1215	1482	1316	1325	histone deacetylase 8
NUP62CL	1509	1302	1390	1246	1167	1325	nucleoporin 62kDa C-terminal like
GTF2B	1414	1416	1365	1287	1177	1325	general transcription factor IIA, 2, 12kDa
TIAL1							
	1533	1297	1453	1333	1318	1324	TIA1 cytotoxic granule-associated RNA binding protein-like 1
GNPNAT1	1433	1103	1344	988	1326	1324	glucosamine-6-phosphate deaminase 2
AP3B1	1582	1169	1581	1183	1079	1323	adaptor-related protein complex 3, beta 1 subunit
TST	1410	1450	1511	1417	1407	1323	thiosulfate sulfurtransferase (rhodanese)
LOC100543796	1868	1275	1710	1148	1306	1321	heat shock protein beta-7-like
TAX1BP3	1604	1271	1456	1139	1272	1321	Tax1 (human T-cell leukemia virus type I) binding protein 3
TRIAP1	1447	1316	1425	1101	1356	1321	TP53 regulated inhibitor of apoptosis 1
LOC104911102	1445	1164	1476	1237	1210	1320	cytoskeleton-associated protein 5-like
HTRA2	1422	1504	1396	1224	1357	1319	HtrA serine peptidase 1
ITFG3	1245	1269	1172	1230	1301	1319	integrin alpha FG-GAP repeat containing 2
SCN3B	1092	1155	1104	1035	1385	1319	sodium channel, voltage-gated, type III, beta subunit
CFLAR	1353	1359	1358	1409	1301	1319	cofilin 2 (muscle)
TIA1	1398	1332	1404	1413	1290	1318	TIA1 cytotoxic granule-associated RNA binding protein
RAC3							ras-related C3 botulinum toxin substrate 3 (rho family, small GTP binding
	1310	1333	1200	1282	1374	1318	protein Rac3)
SNX6	1468	1279	1419	1275	1196	1318	sorting nexin 6
COMMD7	1582	1279	1433	1310	1379	1317	COMM domain containing 6
MMADHC							methylmalonic aciduria (cobalamin deficiency) cblD type, with
	1439	1234	1372	1291	1220	1317	homocystinuria
SCAMP4	1586	1244	1425	1131	1359	1317	secretory carrier membrane protein 4
PPP1R27	634	1630	961	1571	1031	1317	protein phosphatase 1, regulatory subunit 27
AKTIP	1039	1283	1141	1304	1180	1317	AKT interacting protein
LOC104909632	1159	1177	1212	1261	1152	1316	baculoviral IAP repeat-containing protein 6-like
FAM65B	2374	1024	1776	1280	1503	1315	family with sequence similarity 65, member A
GTF3C1	1203	1173	1146	1172	1034	1315	general transcription factor IIH, polypeptide 5
LOC104916328	1229	1102	1298	1129	1239	1314	uncharacterized LOC104916328
NFE2L1	1476	1484	1446	1568	1409	1314	nuclear factor, erythroid 2-like 1
BAP1							
	1490	1381	1330	1244	1347	1313	BRCA1 associated protein-1 (ubiquitin carboxy-terminal hydrolase)
LOC104911227	1005	1179	1375	1551	1099	1313	histone H1.01-like
AKIRIN2	1582	1093	1363	1098	1408	1312	akirin 2
RPAP3	1339	1109	1298	1203	1159	1312	RNA polymerase II associated protein 3
LOC104910249	1170	1354	1154	1031	1190	1312	uncharacterized LOC104910249
FEM1B	1690	1249	1364	1190	1400	1311	fem-1 homolog a (C. elegans)

NRP2	1657	1428	1629	1272	1204	1310	neuropilin 2
TNFRSF21	1810	1342	1397	1277	1394	1310	tumor necrosis factor receptor superfamily, member 21
ECI2	1283	1522	1411	1516	1404	1310	enoyl-CoA delta isomerase 1
DPY19L1	1645	1279	1599	1149	1232	1309	dermatopontin
ZC3H7A	1580	1295	1503	1270	1302	1309	zinc finger CCHC-type containing 7A
FUNDCl	1128	1137	1226	1236	1298	1309	fucokinase
FAM117A	1281	1293	1393	1331	1239	1309	family with sequence similarity 114, member A2
GPR1	1045	1427	1231	1672	1248	1308	glycoprotein (transmembrane) nmb
PRRC2C	1671	1293	1484	1307	1366	1308	proline-rich coiled-coil 2C
CPSF2	1265	1090	1280	1212	1229	1308	cleavage and polyadenylation specific factor 1, 160kDa
MED1	1648	1220	1530	1196	1425	1308	mediator complex subunit 1
KATNA1	1569	1098	1469	1015	1485	1308	K(lysine) acetyltransferase 7
TTC1	1260	1156	1299	1315	1308	1307	tetratricopeptide repeat domain 1
RWDD1	1391	1215	1445	1197	1371	1307	RWD domain containing 1
ITM2B	1412	1451	1449	1461	1416	1306	integral membrane protein 2A
LOC100538959	1515	1311	1374	1152	1287	1306	signal-regulatory protein delta-like
ADPRM							
	837	1093	718	1045	1051	1306	ADP-ribose/CDP-alcohol diphosphatase, manganese-dependent
SLC25A36							
	995	1339	1041	1304	990	1304	solute carrier family 25 (pyrimidine nucleotide carrier), member 36
LOC100541605	1273	1240	1342	1383	1429	1303	olfactory receptor-like protein COR6
EDEM1	1305	1222	1316	1145	1276	1302	enhancer of mRNA decapping 3
G2E3	1435	1007	1424	1166	1225	1302	G0/G1 switch 2
CDK13	1619	1341	1425	1273	1468	1302	cyclin-dependent kinase 12
USP48	1451	1290	1343	1374	1234	1302	ubiquitin specific peptidase 48
TFPI2	1496	1206	1326	946	1292	1301	tissue factor pathway inhibitor 2
STX16	1454	1148	1446	1264	1367	1300	syntaxin 16
ERAP1	1149	1128	1246	1161	939	1300	Era-like 12S mitochondrial rRNA chaperone 1
PWP1	1523	1145	1241	1132	1313	1300	PWP1 homolog (S. cerevisiae)
SH3BP4	1607	1426	1354	1121	1365	1299	SH3-domain binding protein 4
UBFD1	1184	1219	1181	1404	1155	1299	ubiquitin family domain containing 1
LOC100539027	1311	1213	1279	1286	1247	1299	T-cell surface glycoprotein CD1b-3-like
MRP55	1441	1149	1249	1100	1142	1299	mitochondrial ribosomal protein S5
SNX17	1719	1504	1525	1514	1496	1299	sorting nexin 17
STUB1							STIP1 homology and U-box containing protein 1, E3 ubiquitin protein
	1424	1269	1250	1245	1314	1298	ligase
TSPAN12	1235	1218	1362	1229	1335	1297	tetraspanin 12
TIMM21							
	1339	1321	1280	1178	1176	1297	translocase of inner mitochondrial membrane 21 homolog (yeast)
PRKCI	1529	1175	1451	1106	1168	1297	protein kinase C, iota
NAE1	1210	1049	1194	1116	1039	1297	NEDD8 activating enzyme E1 subunit 1
NOC2L	1570	1174	1350	1112	1123	1297	nucleolar complex associated 2 homolog (S. cerevisiae)
EXOSC10	1522	1213	1403	1258	1114	1297	exosome component 1
PGD	1456	1017	1352	982	1149	1296	phosphogluconate dehydrogenase
STAM2							
	1458	1243	1415	1159	1240	1296	signal transducing adaptor molecule (SH3 domain and ITAM motif) 2
CAMK2G	1117	1183	1112	1394	1334	1295	calcium/calmodulin-dependent protein kinase II delta
CHCHD7	1262	1288	1291	1308	1242	1295	coiled-coil-helix-coiled-coil-helix domain containing 6
APBB2							
	985	1228	1168	1347	1335	1294	amyloid beta (A4) precursor protein-binding, family B, member 2
IFITM5	1336	1661	1134	1291	1137	1294	interferon induced transmembrane protein 10
FXN	1514	1118	1637	1116	1042	1294	fucosyltransferase 9 (alpha (1,3) fucosyltransferase)
C30H19orf70	1274	1349	1297	1195	1327	1292	chromosome 30 open reading frame, human C19orf60
MTOR	1327	1222	1323	1212	1160	1292	mechanistic target of rapamycin (serine/threonine kinase)
FAM129A	1265	1196	1363	1300	1272	1292	family with sequence similarity 126, member B
LOC100539992	1420	1261	1388	1157	1184	1292	WD repeat-containing protein 78
FAM114A2	1291	1239	1338	1279	1339	1292	family with sequence similarity 114, member A1
CLIC2	1701	1110	1615	1238	1387	1291	calmegin
TM9SF4	1531	1239	1391	1110	1311	1291	transmembrane 9 superfamily protein member 4
KIAA0232	1116	1303	1119	1292	1232	1289	KIAA0226-like ortholog
FAM214A	1160	1099	1242	1267	1343	1289	family with sequence similarity 213, member A
MTSS1L	1394	1229	1249	1232	1240	1289	metastasis suppressor 1-like
DTX4	1702	1230	1627	1240	1461	1287	deltex 3 like, E3 ubiquitin ligase
VPS72	1742	1457	1395	1319	1139	1287	vacuolar protein sorting 72 homolog (S. cerevisiae)
SEPHS1	1494	1208	1339	1230	1246	1287	selenophosphate synthetase 1
LOC100546553	1690	1152	1699	1199	1189	1287	low density lipoprotein receptor adapter protein 1-like
MRTO4	1559	1326	1383	1057	1214	1287	mRNA turnover 4 homolog (S. cerevisiae)
INCENP	1678	1146	1509	1131	1172	1286	internexin neuronal intermediate filament protein, alpha
ZEB1	1508	1143	1515	1424	1246	1286	zinc finger E-box binding homeobox 1
LOC100550262							
	1490	1148	1319	1079	1310	1285	ankyrin repeat and fibronectin type-III domain-containing protein 1-like
PDCD6	1312	1170	1277	1105	1204	1285	programmed cell death 6
UBE3B	1843	1277	1575	1236	1475	1285	ubiquitin protein ligase E3B
DYNC1LI1	1560	1273	1492	1219	1277	1285	dynein, cytoplasmic 1, intermediate chain 2
LOC100545422	1551	1180	1455	1182	1279	1285	tetratricopeptide repeat protein 17
SNW1	1351	1301	1248	1169	1226	1284	SNW domain containing 1
ACOX1	1358	1121	1299	1226	1363	1284	acyl-CoA oxidase 1, palmitoyl
C8H10orf76	1425	1446	1433	1502	1348	1284	chromosome 8 open reading frame, human C10orf71
MRPL38	1507	1316	1404	1167	1207	1284	mitochondrial ribosomal protein L38

LOC100545452	1711	1791	1544	1596	1692	1284	dynein heavy chain 9, axonemal
ADAM17	1417	1286	1360	1287	1332	1283	ADAM metallopeptidase domain 17
SLC25A42	1269	1316	1218	1197	1497	1283	solute carrier family 25, member 42
ISY1	1369	1278	1396	1285	1228	1282	intestine-specific homeobox
LOC104915343	1526	1106	1495	1121	1568	1282	small EDRK-rich factor 1-like
LOC100550272	1109	1359	1193	1418	1289	1282	P protein
VWA9	1354	1057	1240	1135	1280	1282	von Willebrand factor A domain containing 9
COPSS	1276	1193	1225	1268	1310	1282	COP9 signalosome subunit 4
PPT1	1257	1245	1266	1260	1268	1281	palmitoyl-protein thioesterase 1
SPOP	1354	1382	1324	1249	1260	1281	speckle-type POZ protein
YIPF3	1300	1244	1242	1087	1106	1280	Yip1 domain family, member 3
LOC100540154	1228	1392	1182	1387	1205	1280	trinucleotide repeat-containing gene 18 protein
IMPA2	1231	1298	1285	1536	1512	1279	inositol(myo)-1(or 4)-monophosphatase 1
LOC104909975	1286	1076	1352	1292	1446	1279	peroxidase homolog
USP49	1403	1526	1426	1409	1350	1279	ubiquitin specific peptidase 49
MYBBP1A	1664	1107	1405	1055	1270	1279	MYB binding protein (P160) 1a
RIOK3	1519	1261	1506	1321	1275	1278	RIO kinase 3
POMGNT1							
	1392	1318	1266	1281	1317	1277	protein O-linked mannose N-acetylglucosaminyltransferase 1 (beta 1,2-)
NOA1	1336	1060	1321	1182	1226	1277	nitric oxide associated 1
LOC100540739	1439	1198	1528	1149	1327	1277	eomesodermin-like
PROB1	1366	1304	1446	1353	1580	1277	proline-rich basic protein 1
LOC104915007	1105	1251	1188	1170	1043	1276	probable global transcription activator SNF2L2
NCAPH	1657	1169	1509	1033	1066	1276	non-SMC condensin I complex, subunit H
PPFIA1							protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF),
	1527	1196	1405	1208	1302	1276	interacting protein (liprin), alpha 1
CDCA7	2177	1348	1909	1046	1293	1276	cell division cycle associated 4
RNFT1	1263	1242	1223	1210	1222	1275	ring finger protein, transmembrane 1
EMC3	1394	1294	1354	1117	1265	1275	ER membrane protein complex subunit 2
LOC104909896	1179	1179	1405	1227	1213	1275	uncharacterized LOC104909896
LRP12	1346	1237	1319	1248	1312	1275	low density lipoprotein receptor-related protein 12
HS6ST2	1301	1089	1153	1001	1023	1274	heparan sulfate 6-O-sulfotransferase 1
YIPF7	1096	1386	1097	1209	1270	1274	Yip1 domain family, member 7
MMGT1	1453	1347	1353	1257	1383	1274	membrane magnesium transporter 1
PITPNA	1369	1274	1181	1207	1154	1273	phosphatidylinositol transfer protein, alpha
RPA2	1571	1174	1480	984	1171	1273	replication protein A2, 32kDa
SPCS3							
	2159	1448	2016	1345	1595	1272	signal peptidase complex subunit 3 homolog (S. cerevisiae)
TUBGCP4	1408	1073	1271	1259	1273	1272	tubulin, gamma complex associated protein 4
CCNT2	1258	1155	1201	1222	1176	1272	cyclin T1
MRPL32	1416	1177	1309	1069	1149	1272	mitochondrial ribosomal protein L32
TCF25	1377	1191	1268	1204	1208	1271	transcription factor 25 (basic helix-loop-helix)
NISCH	1308	1273	1356	1374	1424	1270	nischarin
ARHGAP31	1706	1242	1486	1198	1317	1270	Rho GTPase activating protein 31
TDRD3	1503	1276	1532	1358	1332	1270	tudor domain containing 3
KANK4	1518	1228	1308	1232	1334	1270	KN motif and ankyrin repeat domains 3
LOC100551434	1572	1210	1368	1118	1339	1269	transmembrane protein 183A-like
DHX30	1491	1335	1350	1365	1423	1269	DEAH (Asp-Glu-Ala-His) box helicase 15
FAT1	1592	1479	1708	1358	1684	1269	FAST kinase domains 5
PPIH	1370	1151	1302	1051	1174	1269	peptidylprolyl isomerase H (cyclophilin H)
LOC100542272	1503	1242	1428	1122	1257	1269	zinc finger SWIM domain-containing protein 6-like
LOC104914664	1363	1008	1326	1152	1223	1268	amino-terminal enhancer of split
HIPK3	990	1341	1125	1559	1159	1268	homeodomain interacting protein kinase 2
PSIP1	1462	1006	1420	972	1064	1268	PC4 and SFRS1 interacting protein 1
SPG11	1513	1253	1344	1254	1350	1268	spastic paraplegia 11 (autosomal recessive)
PPIL2	1552	1086	1287	1128	1277	1267	peptidylprolyl isomerase (cyclophilin)-like 2
ANKRD46	1427	1167	1405	1161	1296	1266	ankyrin repeat domain 46
GMPS	1457	1115	1352	1059	1189	1265	guanosine monophosphate reductase
ARAP3							
	1406	1175	1332	1173	1381	1265	ArfGAP with RhoGAP domain, ankyrin repeat and PH domain 3
MTFR1	1546	1116	1451	1023	1217	1264	mitochondrial fission regulator 1
MORC4	1332	1191	1379	1306	1099	1264	MORC family CW-type zinc finger 4
TMEM165	1303	1152	1230	1074	1206	1264	transmembrane protein 165
YTHDC2	1053	1154	1199	1198	903	1263	YTH domain containing 2
NT5C3A	767	1218	878	1561	1430	1263	5'-nucleotidase, cytosolic IIIA
DEPTOR	883	1444	1028	1809	1214	1263	DEP domain containing 7
TACC1	1343	1275	1281	1193	1246	1262	transforming, acidic coiled-coil containing protein 1
EHBP1	1543	1267	1470	1326	1435	1261	early growth response 4
ARHGEF6	1494	1046	1286	1140	1386	1261	Rac/Cdc42 guanine nucleotide exchange factor (GEF) 6
LOC104912951	1359	1045	1295	1062	1205	1260	HEAT repeat-containing protein 3-like
CTDSP12							CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) small
	1444	1309	1439	1223	1241	1260	phosphatase-like
LOC100542612	1261	1351	1213	1377	1289	1259	uncharacterized LOC100542602
USP16	1356	1106	1266	1176	1175	1259	ubiquitin specific peptidase 16
LOC104913914	1072	1114	1171	1266	1486	1259	RNA-binding protein Musashi homolog 2-like
RAB5B	1293	1306	1243	1184	1205	1259	RAB5B, member RAS oncogene family
INTS1	1465	1167	1389	1175	1202	1258	insulin receptor-related receptor
THAP9	1343	1375	1359	1168	1228	1258	THAP domain containing 9
HPRT1	1204	1163	1242	1284	1197	1258	hematopoietic prostaglandin D synthase

LOC104917565	1676	969	1821	1251	1228	1257	periostin-like
BRD8	1304	1342	1336	1321	1132	1257	bromodomain containing 7
LOC100541463	1451	1197	1283	1147	1310	1257	WAS/WASL-interacting protein family member 3-like
UGDH	1379	1410	1273	1178	1162	1257	UDP-glucose 6-dehydrogenase
LOC100549822	1603	1236	1559	1337	1520	1256	metabotropic glutamate receptor 5-like
CASC5	1527	1106	1448	1182	1092	1256	cancer susceptibility candidate 4
CALCOCO2	1280	1254	1295	1292	1207	1256	calcitonin-related polypeptide alpha
EBNA1BP2	1543	1131	1434	982	1281	1255	early B-cell factor 3
CAT	1120	1517	1131	1440	977	1255	calpastatin
RFT1	1172	1084	1158	1129	1112	1255	RFT1 homolog (S. cerevisiae)
CSRP2	1197	1253	1320	1238	1313	1254	cysteine and glycine-rich protein 1
SLC16A3							
	807	1098	897	1092	991	1254	solute carrier family 16 (monocarboxylate transporter), member 3
UBL3	1193	1271	1212	1168	1147	1254	ubiquitin-like 3
CCNB3	1613	1024	1608	1063	1241	1254	cyclin B2
PARVG	1423	1021	1434	947	1247	1253	parvin, gamma
KIF20A	1747	1047	1620	1163	1205	1253	kinesin family member 1B
EMC6	1375	1274	1336	1195	1279	1253	ER membrane protein complex subunit 4
CRABP1							
	1384	1229	1283	1147	1260	1252	complement component (3b/4b) receptor 1 (Knops blood group)
SLC30A4	1315	1143	1313	1196	1293	1252	solute carrier family 30 (zinc transporter), member 4
MRPS12	1437	1319	1415	1184	1221	1252	mitochondrial ribosomal protein S12
POLRMT	1261	1110	1169	1116	1096	1252	polymerase (RNA) mitochondrial (DNA directed)
RALGAPA1	1843	1300	1908	1353	1966	1251	Ral GTPase activating protein, alpha subunit 1 (catalytic)
NFX1	1247	1187	1244	1260	1235	1251	nuclear transcription factor, X-box binding 1
BET1L	1150	1085	1219	1200	1128	1250	Bet1 golgi vesicular membrane trafficking protein-like
USP8	1431	1116	1361	1245	1227	1250	ubiquitin specific peptidase 8
EEA1	1453	1144	1403	1162	1145	1249	endothelin receptor type B
TNFRSF1A	1213	1222	1310	1428	1192	1249	tumor necrosis factor receptor superfamily, member 1A
STARD8	1658	1346	1478	1234	1376	1249	StAR-related lipid transfer (START) domain containing 8
KIAA1462	1417	1472	1457	1496	1387	1249	KIAA1456 ortholog
LIN7C	1341	1271	1203	1112	1244	1247	lin-7 homolog A (C. elegans)
LOC100551399	1296	1172	1248	1124	1260	1247	importin subunit alpha-5
LOC100546534	1377	1229	1300	1217	1188	1247	muellerian-inhibiting factor-like
PPAT	1410	1091	1354	1199	1394	1246	phosphoribosyl pyrophosphate amidotransferase
URM1	1260	1349	1320	1266	1228	1246	ubiquitin related modifier 1
POLR2B							
	1525	1112	1452	1261	1233	1246	polymerase (RNA) II (DNA directed) polypeptide B, 140kDa
MKL1	1036	1127	1110	1354	1171	1246	megakaryoblastic leukemia (translocation) 1
RAB5C	1376	1152	1323	1051	1142	1245	RAB5C, member RAS oncogene family
MRPL41	1353	1198	1271	1108	1328	1245	mitochondrial ribosomal protein L41
KIAA0391	1259	1012	1224	1116	1150	1244	KIAA0368 ortholog
LOC100543617	1294	1060	1368	1053	1192	1244	keratin, type II cytoskeletal 5-like
CLPTM1L	1432	1213	1340	1074	1041	1244	cleft lip and palate associated transmembrane protein 1
FKBP8	1539	1254	1388	1214	1223	1243	FK506 binding protein 7
MSANTD4							
	1164	1073	1287	1024	1118	1243	Myb/SANT-like DNA-binding domain containing 4 with coiled-coils
BUB1							
	1633	1067	1466	1085	1132	1243	beta-transducin repeat containing E3 ubiquitin protein ligase
DDX18	1715	1154	1442	1093	1257	1243	DEAD (Asp-Glu-Ala-Asp) box helicase 17
UROD	1410	1231	1354	1094	1235	1242	uroporphyrinogen decarboxylase
ABCB7							
	1339	1067	1294	1245	1265	1242	ATP-binding cassette, sub-family B (MDR/TAP), member 7
COL20A1	1152	1019	1205	1427	937	1242	collagen, type I, alpha 2
LOC100538971	1357	1282	1384	1092	1228	1242	peptidyl-glycine alpha-amidating monooxygenase-like
EDNRA	1284	1065	1423	1109	1152	1240	endothelin 2
GALNT1	1479	1251	1452	1273	1207	1240	galactosamine (N-acetyl)-6-sulfatase
CHMP5	1324	1111	1330	1118	1211	1240	charged multivesicular body protein 4C
LOC100550496	1271	1001	1240	1194	1198	1240	obg-like ATPase 1
TXNDC9	1185	1067	1213	1152	1234	1238	thioredoxin domain containing 9
LOC104913167	1262	1495	1269	1233	1173	1238	uncharacterized LOC104913167
DNAJB11	1497	1065	1325	987	1157	1238	DnaJ (Hsp40) homolog, subfamily B, member 1
EXOSC1	1201	1302	1189	1159	1312	1237	endo/exonuclease (5'-3'), endonuclease G-like
THUMPD3	1343	1116	1203	1084	1197	1236	THUMP domain containing 3
KANK3	1408	1444	1392	1338	1499	1236	KN motif and ankyrin repeat domains 1
KRAS	1424	1260	1353	1119	1185	1236	kaptin (actin binding protein)
RAPGEF1	1743	1325	1551	1363	1485	1236	Rap guanine nucleotide exchange factor (GEF) 1
TBC1D14	1283	1204	1230	1201	1162	1235	TBC1 domain family, member 14
LOXL1	1289	1195	1094	1123	1522	1235	lysyl oxidase-like 1
LTA4H	1474	1020	1447	1100	1463	1235	leukotriene A4 hydrolase
EIF2AK4	1378	1090	1294	1202	1206	1234	eukaryotic translation initiation factor 2-alpha kinase 3
MSS51	1013	1261	957	1211	1246	1233	MSS51 mitochondrial translational activator
RFC5	1595	1252	1390	1064	1052	1233	replication factor C (activator 1) 5, 36.5kDa
CLIP2	1328	1157	1372	1261	1207	1233	CAP-GLY domain containing linker protein 1
YES1	1747	1289	1640	1233	1305	1233	YES proto-oncogene 1, Src family tyrosine kinase
LOC100541468	1160	715	1149	828	1708	1233	cytochrome P450 2J2-like
RBM34	1074	1252	1165	1213	939	1233	RNA binding motif protein 34
LOC100549696	1429	1280	1376	1267	1349	1232	interleukin-4-like
SMEK1	1241	1237	1194	1147	1035	1232	SMEK homolog 1, suppressor of mek1 (Dictyostelium)

RUNDC1	1368	1281	1324	1092	1271	1232	RUN domain containing 1
NUDCD2	1303	1081	1201	1066	1358	1232	NudC domain containing 2
RFC2	1641	1139	1405	954	1039	1231	replication factor C (activator 1) 2, 40kDa
KY	823	1228	761	1350	2366	1231	KxDL motif containing 1
VPS16	1346	1320	1369	1262	1198	1231	vacuolar protein sorting 16 homolog (S. cerevisiae)
TRAPPC4	1102	1174	1146	1043	1117	1230	trafficking protein particle complex 4
NR2C1	1210	1164	1227	1245	1275	1230	nuclear receptor subfamily 2, group C, member 1
FLOT2	1423	1230	1272	1022	1174	1229	filamin B, beta
TXNDC17	1532	1224	1516	1148	1478	1228	thioredoxin domain containing 17
UBE2B	1217	1221	1385	1553	1282	1227	ubiquitin-conjugating enzyme E2B
ATG16L1	1462	1184	1293	1077	1135	1227	autophagy related 16-like 1 (S. cerevisiae)
RACGAP1	1407	1011	1394	968	1044	1227	Rac GTPase activating protein 1
IPO8	1205	912	1182	1103	1181	1225	importin 5
VAMP3	1257	1194	1164	1208	1150	1225	vesicle-associated membrane protein 3
HIPK2	1182	1316	1159	1423	1461	1224	homeodomain interacting protein kinase 1
KIAA2026	967	1070	1038	1150	1105	1224	KIAA2022 ortholog
CDKN2AIP	1391	1233	1353	1180	1231	1224	cyclin-dependent kinase inhibitor 1B (p27, Kip1)
NANS	1223	1016	1178	1005	1127	1224	N-acetylneuraminic acid synthase
C28H6orf106	1181	1148	1219	1190	1302	1224	chromosome 28 open reading frame, human C1orf74
KRIT1	1212	1070	1245	1140	1197	1224	kringle containing transmembrane protein 1
STC2	1529	906	1553	751	1263	1223	stanniocalcin 2
GADD45A							
ELAC2	1240	1080	1279	1419	1448	1223	glutamate decarboxylase 2 (pancreatic islets and brain, 65kDa)
LOC100541134	1306	996	1293	1063	1185	1222	eukaryotic translation initiation factor 6
NPEPL1	1610	1159	1660	963	1633	1222	lymphotactin-like
TSC22D2	1329	1216	1319	1260	1270	1221	aminopeptidase-like 1
SLX4	1644	1081	1527	1072	1287	1221	TSC22 domain family, member 2
TCPI1L2	1379	1087	1345	1090	1109	1221	SLX4 structure-specific endonuclease subunit
CSTF2	789	1498	1120	1816	1175	1221	t-complex 11, testis-specific-like 2
SNX27	1358	1126	1275	1055	1088	1220	cleavage stimulation factor, 3' pre-RNA, subunit 1, 50kDa
DPY19L4	1290	1120	1219	1097	1200	1220	sorting nexin family member 27
LOC100551040	1204	1341	1234	1370	1178	1219	dpy-19-like 1 (C. elegans)
DGKD	1364	1138	1302	988	1321	1219	crystallin lambda 1
RAB9A	1158	1150	1214	1222	1190	1219	diacylglycerol kinase, beta 90kDa
SNRNPB2	1229	1151	1256	1236	1208	1219	RAB9A, member RAS oncogene family
TAF12	1291	1146	1254	1056	1108	1218	small nuclear ribonucleoprotein polypeptide B
	1276	1128	1213	1055	1196	1218	TAF12 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 20kDa
BMPR1A	1255	1239	1419	1215	1211	1218	bone morphogenetic protein receptor, type IA
MESDC2	1263	966	1165	1055	1171	1217	mesoderm development candidate 2
MEAF6	1305	1245	1235	1192	1205	1217	MYST/Esa1-associated factor 6
UBE2V1	1421	1136	1321	1120	1221	1216	ubiquitin-conjugating enzyme E2 variant 1
SFRP5	2044	1402	1429	1057	1349	1216	secreted frizzled-related protein 5
EFTUD1	1266	987	1175	1070	1161	1216	EFR3 homolog B (S. cerevisiae)
EEPD1							
	844	1177	1206	1165	978	1215	eukaryotic elongation factor, selenocysteine-tRNA-specific
CCDC69	1230	1395	1057	1115	1215	1215	coiled-coil domain containing 68
CNDP2	1579	1063	1556	1046	1262	1214	carnosine dipeptidase 1 (metallopeptidase M20 family)
HS2ST1	1422	1177	1278	1176	1130	1214	HCLS1 binding protein 3
LOC100547241	1182	895	1348	970	924	1213	ectoderm-neural cortex protein 1-like
NOTCH2	1425	1031	1291	1151	1165	1213	notch 2
LOC100538839	1012	1091	1096	1256	1397	1213	carbonic anhydrase 3-like
AFF1	1341	1030	1302	1228	1572	1213	AF4/FMR2 family, member 1
CIRH1A	1605	1098	1425	1201	1135	1211	cold inducible RNA binding protein
AP1B1	1537	1192	1386	1309	1312	1211	adaptor-related protein complex 1, beta 1 subunit
FRMD4B	1038	910	1231	1199	1079	1211	FERM domain containing 4A
PPME1	1274	1103	1209	1033	1147	1211	protein phosphatase methylesterase 1
POMT2	1221	1136	1151	1142	1231	1211	protein-O-mannosyltransferase 2
EMC2	1119	1021	1120	919	1060	1211	ER membrane protein complex subunit 1
ARNTL2	1033	1065	1037	1043	1118	1210	aryl hydrocarbon receptor nuclear translocator-like 2
RMND1							
	1171	1153	1232	1074	1092	1210	required for meiotic nuclear division 1 homolog (S. cerevisiae)
LOC104909838	729	1256	877	1264	1346	1210	sodium-coupled neutral amino acid transporter 4-like
GGA1	1312	1124	1213	1102	1262	1210	GDNF family receptor alpha like
MAST4							
	1048	1191	1222	1192	1034	1209	microtubule associated serine/threonine kinase family member 4
PAG1							phosphoprotein membrane anchor with glycosphingolipid microdomains
	1126	1047	1107	1139	1118	1209	1
P2RX5	1010	1121	1118	1309	1372	1208	purinergic receptor P2X, ligand-gated ion channel, 5
ZRANB1	1126	1128	1172	1164	1100	1208	zinc finger, RAN-binding domain containing 1
SUPT5H	1431	1210	1341	1273	1253	1208	suppressor of Ty 5 homolog (S. cerevisiae)
UTP18							
	1345	1110	1290	1042	990	1207	UTP18 small subunit (SSU) processome component homolog (yeast)
RXRA	1061	1062	1032	1243	1482	1207	retinoid X receptor, alpha
RPS6KA6	1347	1175	1304	1176	1260	1207	ribosomal protein S6 kinase, 90kDa, polypeptide 6
HMG20A	1300	1135	1298	1110	1116	1207	hemicentin 1
MAP2K2	1306	947	1306	1078	1169	1207	mitogen-activated protein kinase kinase 2
SNX14	1068	1085	1057	1120	1171	1207	sorting nexin 14
MOB1A	1557	1163	1348	1069	1205	1207	MOB kinase activator 1A

ARHGEF26	1308	1241	1227	1175	1213	1206	Rho guanine nucleotide exchange factor (GEF) 26
CHORDC1	1594	1205	1367	1100	1156	1206	chondrolectin
FAM78A	988	923	841	851	1276	1206	family with sequence similarity 76, member B
ARHGAP5	1505	1180	1479	1185	1145	1205	Rho GTPase activating protein 5
S100A11	1147	1215	1184	1014	1247	1205	S100 calcium binding protein A11
ILKAP	1393	1280	1338	1143	1161	1205	integrin-linked kinase
LOC104909798	881	1096	1040	974	1011	1204	A-kinase anchoring protein 7
PNPT1	1285	1010	1249	1006	1066	1204	polyribonucleotide nucleotidyltransferase 1
MYO9B	1316	1198	1218	1164	1269	1204	myosin IXB
LOC100538849	1380	1184	1411	1049	1420	1204	rab GTPase-activating protein 1-like, isoform 10
CD46	1406	1068	1412	1149	1364	1203	CD44 molecule (Indian blood group)
PPIF	1335	928	1329	1025	1426	1202	peptidylprolyl isomerase F
LRCH3							
	1280	1146	1185	1182	1115	1202	leucine-rich repeats and calponin homology (CH) domain containing 3
C1H12orf45	1190	1158	1192	1225	1192	1202	chromosome 1 open reading frame, human C12orf40
FBXO11	1432	1258	1367	1230	1225	1201	F-box and leucine-rich repeat protein 8
NUP107	1559	1055	1410	1094	1123	1201	nucleoporin 107kDa
LOC104912467	1464	2141	1211	1372	1211	1201	cyclin-dependent kinase inhibitor 1-like
AEBP1	1337	1234	1321	1120	1253	1201	AE binding protein 1
CHPF2	1263	1165	1246	1082	1242	1200	chondroitin polymerizing factor
PLIN2	1238	1242	1293	1260	974	1199	perilipin 2
FKBP5	1520	2163	1385	2466	896	1199	FK506 binding protein 4, 59kDa
LOC100549073	1159	1506	1195	1347	1305	1199	non-canonical poly(A) RNA polymerase PAPD5-like
SMG7	1586	1215	1392	1218	1335	1199	SMG7 nonsense mediated mRNA decay factor
FCF1	1337	1071	1264	984	1124	1198	F-box and WD repeat domain containing 8
DDX49	1224	1098	1153	988	1105	1198	DEAD (Asp-Glu-Ala-Asp) box polypeptide 47
SMARCB1							SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1
	1529	1194	1332	1123	1127	1198	LIM and calponin homology domains 1
LIMD1	1558	1251	1425	1094	1269	1198	insulin-like growth factor binding protein 3
IGFBP4	1438	1205	1304	1136	1272	1198	discoidin domain-containing receptor 2-like
LOC100551074	1294	1383	1210	1370	1480	1197	sorting nexin-29-like
LOC100541480	1261	1274	935	1023	925	1197	myotubularin related protein 4
MTMR4	1338	1042	1212	1012	1197	1197	peroxisomal biogenesis factor 16
PEX16	1139	1288	1068	1140	983	1197	peptidylprolyl isomerase E (cyclophilin E)
PPIE	1491	1216	1301	995	1171	1197	KIAA0408 ortholog
KIAA0430	1208	1079	1274	1244	1075	1196	myoD family inhibitor domain-containing protein-like
LOC100538595	1359	1421	1296	1140	1238	1196	zinc finger and BTB domain containing 1
ZBTB1	1415	1200	1421	1227	1224	1195	
MPHOSPH10							
	1463	1104	1402	1071	1145	1194	M-phase phosphoprotein 10 (U3 small nucleolar ribonucleoprotein)
NFKB1B							nuclear factor of kappa light polypeptide gene enhancer in B-cells
	1335	1198	1229	1077	1185	1194	inhibitor, beta
CUTA	1350	1709	1206	1569	1219	1194	cullin 5
MRPL51	1266	1280	1227	1055	1150	1194	mitochondrial ribosomal protein L51
STARD4	1306	745	1323	796	905	1193	StAR-related lipid transfer (START) domain containing 4
TTC19	1149	1302	1235	1177	1194	1193	tetratricopeptide repeat domain 19
MOB2	1110	1302	1302	1213	1179	1193	MOB kinase activator 2
MANF	1464	1074	1275	932	1027	1192	mesencephalic astrocyte-derived neurotrophic factor
SLC39A10	1346	1286	1402	1256	1167	1192	solute carrier family 39 (zinc transporter), member 10
ARHGEF10L	979	1225	1088	1068	1234	1192	Rho guanine nucleotide exchange factor (GEF) 10-like
WDR61	1246	1063	1227	1014	1124	1191	WD repeat domain 61
KLHL13	1068	966	1146	1051	1162	1191	kelch-like family member 12
C2H6orf203	1327	1169	1203	1154	1179	1191	chromosome 2 open reading frame, human C6orf165
NUCKS1							
	1452	1050	1340	981	1057	1191	nuclear casein kinase and cyclin-dependent kinase substrate 1
MRPL54	1149	1163	1164	977	1139	1191	mitochondrial ribosomal protein L54
MON2	1145	1197	1170	1280	1132	1191	MON2 homolog (S. cerevisiae)
TIMMDC1							
	1265	1166	1238	1110	1382	1190	translocase of inner mitochondrial membrane domain containing 1
MCM3	1770	1136	1524	927	1082	1190	minichromosome maintenance complex component 3
CLEC3B	1242	1501	1445	1240	1522	1190	C-type lectin domain family 3, member A
DCAF10	1288	1001	1305	984	1030	1189	developing brain homeobox 2
IRS4	930	997	1016	1561	887	1189	insulin receptor substrate 2
SYNRG	1271	1053	1213	1086	1128	1189	synergins, gamma
SNAI2	1287	884	1289	983	1240	1189	snail family zinc finger 2
MRPL2	1212	1269	1144	1171	1136	1189	mitochondrial ribosomal protein L2
PEX6	1155	1170	1117	1219	1132	1188	peroxisomal biogenesis factor 6
COL14A1	1286	1051	1667	976	863	1188	collagen, type XIII, alpha 1
LOC100549138	1540	1255	1345	1074	1191	1188	smoothelin-like protein 2
AP1G1	1341	1094	1277	1148	1189	1187	adaptor-related protein complex 1, gamma 1 subunit
IMP3	1477	1021	1418	912	1328	1187	inner membrane protein, mitochondrial
C2H9orf72	1106	1048	1176	1092	878	1187	chromosome 2 open reading frame, human C9orf64
LMO2	944	1351	849	924	810	1187	lamin B2
GTF2A2	1368	1109	1298	1006	1222	1187	general transcription factor IIA, 1, 19/37kDa
GCAT	1037	1252	1076	1103	1041	1187	group-specific component (vitamin D binding protein)
LOC100540096	1342	1271	1283	1192	1195	1186	C-terminal-binding protein 2
CHD2	1197	962	1228	1220	1194	1186	chromodomain helicase DNA binding protein 1-like
TBC1D1	1083	1120	1223	1159	1211	1186	TBC1 (tre-2/USP6, BUB2, cdc16) domain family, member 1
POLR1B	1408	1094	1200	1101	1274	1186	polymerase (RNA) I polypeptide B, 128kDa

LOC104911005	1254	1115	1251	1104	1103	1186	fatty acyl-CoA reductase 1-like
USP24	1078	1139	1064	1352	1129	1186	ubiquitin specific peptidase 24
MAP3K3	1173	1200	1233	1217	1108	1185	mitogen-activated protein kinase kinase 3
NABP1	1421	1070	1168	972	1196	1185	nucleic acid binding protein 1
EP400	1363	1120	1332	1235	1250	1182	E1A binding protein p300
PTPN14	1543	1352	1531	1282	1257	1181	protein tyrosine phosphatase, non-receptor type 14
MAN1B1	1407	1059	1232	943	1094	1181	mannosidase, alpha, class 1B, member 1
TMEM52	1365	1432	1425	1540	1612	1181	transmembrane protein 52
FNDC3B	1233	1075	1176	1183	1141	1181	fibronectin type III domain containing 3A
MIB1	1414	1149	1363	1139	1207	1181	mindbomb E3 ubiquitin protein ligase 1
SRP14							
	1382	1044	1283	1027	1233	1181	signal recognition particle 14kDa (homologous Alu RNA binding protein)
NKIRAS2	1347	1217	1358	1276	1188	1181	NFKB inhibitor interacting Ras-like 2
DTX2	1283	1177	1343	1110	1042	1179	deltex 1, E3 ubiquitin ligase
KIAA1143	1267	1070	1210	934	1112	1179	KIAA1109 ortholog
ARL14EP	1316	982	1382	990	1157	1178	ADP-ribosylation factor-like 14 effector protein
LOC104914085	1412	1143	1378	1126	1252	1178	uncharacterized LOC104914085
POLR2F	1235	1144	1204	995	1126	1178	polymerase (RNA) II (DNA directed) polypeptide F
SLC9B2							solute carrier family 9, subfamily B (NHA2, cation proton antiporter 2), member 2
LZIC	1305	999	1244	1124	1087	1178	leucine zipper and CTNNBIP1 domain containing
ERLEC1	1378	1220	1290	1053	1099	1177	glutamate-rich 6B
CCNG2	939	932	1139	1359	960	1177	cyclin G1
RAB3GAP1	1201	1221	1241	1169	1116	1177	RAB3 GTPase activating protein subunit 1 (catalytic)
SUSD6	1382	1127	1306	1113	1279	1176	sushi domain containing 6
LOC100540612	1116	955	1171	1055	1009	1175	myelin-oligodendrocyte glycoprotein-like
LEPROTL1	1217	1013	1116	1007	1112	1174	leptin receptor overlapping transcript
PDSSA	1406	1055	1332	1354	1179	1174	PDSS cohesin associated factor A
POLDIP3	1295	1097	1237	1080	1202	1174	polymerase (DNA-directed), delta interacting protein 3
IBA57	1261	1075	1125	1003	1245	1173	isoleucyl-tRNA synthetase 2, mitochondrial
MIEF2	1007	1254	933	1106	1273	1173	mitochondrial elongation factor 2
PITRM1	1318	969	1243	936	1041	1173	pitrilysin metalloproteinase 1
SLC25A43	1004	917	1026	1062	1299	1172	solute carrier family 25, member 43
TOMM40L							
	1104	1328	1040	1134	1116	1172	translocase of outer mitochondrial membrane 40 homolog (yeast)-like
LOC104914161	1192	1020	1201	1091	1080	1172	kinesin family member 1B
AKAP8L	1310	976	1329	1006	1171	1172	A kinase (PRKA) anchor protein 8-like
TTLL11	967	1054	1026	1112	925	1171	tubulin tyrosine ligase-like family, member 11
TMTC3	1261	1127	1255	1143	1163	1171	transmembrane and tetratricopeptide repeat containing 3
ANGEL2	1478	1221	1493	1206	1237	1170	angel homolog 2 (Drosophila)
MAPK8	1257	1028	1292	1204	1242	1169	mitogen-activated protein kinase 8
LAMTOR2							
	1102	1165	1097	1053	1187	1169	late endosomal/lysosomal adaptor, MAPK and MTOR activator 1
LOC100548274	1121	913	1187	947	1043	1169	cytoplasmic FMR1-interacting protein 1-like
GMPPB	1063	1116	1015	839	750	1169	GDP-mannose pyrophosphorylase A
NAMPT	758	1132	847	1409	1293	1169	nicotinamide phosphoribosyltransferase
C2CD5	1049	1105	1021	1092	1003	1169	C2 calcium-dependent domain containing 4C
RAB14	1181	976	1232	979	1047	1168	RAB14, member RAS oncogene family
NPR2	1115	1244	1134	1202	808	1168	natriuretic peptide receptor 2
LMAN2	1511	1268	1337	1047	1157	1167	lectin, mannose-binding, 1
LOC104917359	968	1210	1106	1250	1086	1167	nucleoside diphosphate kinase pseudogene
R3HCC1	1396	1006	1305	1008	1248	1167	R3H domain and coiled-coil containing 1
LOC104909916	891	1461	981	1321	1072	1166	uncharacterized LOC104909916
DGCR8	1212	991	1150	1292	1297	1166	DiGeorge syndrome critical region gene 6-like
SORD	1455	980	1297	1097	1292	1166	sorbitol dehydrogenase
APC	1324	959	1393	1153	1113	1166	adenomatous polyposis coli
RBL1	1574	1114	1344	910	1074	1166	retinoblastoma-like 1
BMP2K	1408	1082	1241	1114	1043	1166	BMP2 inducible kinase
CRIP1	1329	1166	1281	1074	1186	1164	cysteine-rich protein 1 (intestinal)
LOC100550801	1117	1086	1125	1009	1044	1164	GTP-binding protein 10-like
NUB1	1219	1112	1097	1107	1139	1163	negative regulator of ubiquitin-like proteins 1
HERC3	1291	1062	1199	1069	1291	1162	hephaestin-like 1
TMEM184C	1333	1067	1298	1053	1164	1162	transmembrane protein 184C
GID8	1377	1104	1275	1063	1187	1162	GID complex subunit 4
CRYZ	1131	1063	1162	900	984	1162	crystallin, mu
METRNL	1232	1089	1087	983	1005	1161	meteorin, glial cell differentiation regulator-like
CFAP54	1425	1008	1322	996	1140	1160	cilia and flagella associated protein 52
CYR61	1323	1171	1372	1063	962	1160	cytochrome P450 3A80
PDP1	1021	1057	1058	1017	930	1158	pyruvate dehydrogenase phosphatase catalytic subunit 1
WSB2	1371	1239	1312	1136	1185	1158	WD repeat and SOCS box containing 2
N4BP1	1214	1178	1209	1486	1191	1158	NEDD4 binding protein 1
KLHL21	1058	1063	1058	1238	1374	1158	kelch-like family member 20
MYO1H	1482	1053	1288	911	1060	1158	myosin IH
GCFC2	1270	1110	1275	983	1090	1157	GRIP and coiled-coil domain containing 2
CHD7	1214	1091	1316	1198	1210	1157	chromodomain helicase DNA binding protein 5
AQP3	1238	1457	1104	1885	1066	1157	aquaporin 3 (Gill blood group)
TRAPPC11	1235	1074	1158	1229	1150	1157	trafficking protein particle complex 11
ITIH5	1094	1030	1100	1040	1095	1156	inter-alpha-trypsin inhibitor heavy chain 2

NDUFC2							
	1130	1213	1116	1078	1253	1155	NADH dehydrogenase (ubiquinone) 1, subcomplex unknown, 2, 14.5kDa
SHISA2	1814	1269	1612	1022	1148	1155	shisa family member 2
LOC104915419	1129	979	1206	815	830	1155	uncharacterized LOC104915419
MFAP1	1243	1127	1254	1080	1065	1155	microfibrillar-associated protein 1
LOC104913898	1197	1126	1235	1348	1213	1155	DDB1- and CUL4-associated factor 6-like
LHFP	1241	1132	1390	1156	1323	1155	luteinizing hormone/choriogonadotropin receptor
POLR3B	1189	957	1159	1152	1164	1154	polymerase (RNA) III (DNA directed) polypeptide B
SETD6	1243	1066	1091	964	1088	1154	SET domain containing 6
MCM5	1874	1209	1538	887	1106	1153	minichromosome maintenance complex component 5
ERN1	1434	1200	1269	1093	1320	1153	endoplasmic reticulum metalloproteinase 1
LOC104911201	1382	1235	1262	1011	1144	1153	uncharacterized LOC104911201
PEPD	1032	1123	1111	980	1076	1153	peptidase D
LOC104912691	1238	1163	1247	1042	1139	1152	uncharacterized LOC104912691
ARID1B	1194	1192	1138	1231	1034	1152	AT rich interactive domain 1B (SWI1-like)
EDEM3	1277	1199	1261	1090	1098	1152	ER degradation enhancer, mannosidase alpha-like 2
LOC104912097	1507	1329	1353	1228	1288	1152	uncharacterized LOC104912097
BYSL	1321	1136	1265	1021	1193	1151	blood vessel epicardial substance
KIAA1109	1255	1093	1078	1209	1155	1151	KIAA1107 ortholog
NSF	1147	956	1118	932	1005	1151	N-ethylmaleimide-sensitive factor
DVL1	1002	986	983	1134	1071	1150	deoxyuridine triphosphatase
ACSL4	1155	959	1157	998	1119	1150	acyl-CoA synthetase long-chain family member 4
CDC27	1145	953	1104	1053	1064	1150	cell division cycle 26
KDM4A	1197	1068	1199	1143	1033	1150	lysine (K)-specific demethylase 3A
RUM	1115	1052	1187	1091	1061	1149	ring finger protein, LIM domain interacting
MAN2A1	1242	931	1255	1046	1061	1149	mannosidase, alpha, class 2A, member 1
KLHL33	933	1077	955	965	1181	1149	kelch-like family member 32
LOC100545735	1474	1267	1313	1157	1295	1149	acyl-coenzyme A thioesterase 5-like
PPIL4	1623	992	1544	985	1485	1149	peptidylprolyl isomerase (cyclophilin)-like 4
DPP7	967	1285	1069	1224	1130	1148	dipeptidyl-peptidase 6
NDST1	1420	1408	1317	1202	1245	1147	N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 1
SRPX	1154	1528	1189	1163	993	1147	sushi-repeat containing protein, X-linked
NMD3	1216	916	1162	1078	933	1147	NMD3 ribosome export adaptor
NUAK1	1362	1249	1327	1099	1064	1147	NUAK family, SNF1-like kinase, 1
SCAF8	1231	1122	1244	1139	1117	1147	SR-related CTD-associated factor 8
PPP6R3	1285	1027	1291	1068	1196	1147	protein phosphatase 6, regulatory subunit 3
LOC100548808	1294	904	1228	918	1134	1147	myosin X-like
POLB	1260	985	1104	933	1009	1147	polymerase (DNA directed), beta
TMX4	1327	1124	1328	1095	1127	1146	thioredoxin-related transmembrane protein 4
ORC4	1113	1083	1261	1095	1017	1146	origin recognition complex, subunit 4
RPF1	1274	1187	1164	1024	1048	1146	ribosome production factor 1 homolog (S. cerevisiae)
MRPS18A	1302	1013	1143	1017	1101	1145	mitochondrial ribosomal protein S18A
LOC100549832	866	1381	966	1659	1136	1145	TGF-beta receptor type-2-like
HDAC1	1419	1087	1332	975	1214	1144	hypocretin (orexin) neuropeptide precursor
SLC25A39	1655	1275	1331	1142	1330	1144	solute carrier family 25, member 39
MIEF1	1321	1158	1244	1154	1239	1144	mitochondrial elongation factor 1
SFT2D1	1230	1007	1249	1028	1145	1144	SFT2 domain containing 1
TANC1							
	1212	1050	1256	1169	1147	1143	tetratricopeptide repeat, ankyrin repeat and coiled-coil containing 1
OAZ2	1336	1082	1239	1149	1267	1142	ornithine decarboxylase antizyme 2
FEN1	1737	1199	1489	976	1045	1141	fem-1 homolog c (C. elegans)
MRPL55	1154	1114	1259	1095	1242	1141	mitochondrial ribosomal protein L55
MVB12A	1169	1183	1044	1109	1150	1141	multivesicular body subunit 12A
SIGMAR1	1244	1074	1189	987	930	1141	sigma non-opioid intracellular receptor 1
WDR53	1205	1141	1119	1093	1141	1141	WD repeat domain 53
SYNM	1601	1340	1496	1328	1319	1140	synemin, intermediate filament protein
LOC100542113	1383	1194	1551	1173	1204	1140	caprin-2
LIPA	1316	712	1220	785	1256	1140	lines homolog (Drosophila)
PFDN1	1130	1743	1055	1423	960	1139	prefoldin subunit 1
NPC2	1343	1063	1317	1165	1456	1138	Niemann-Pick disease, type C2
LOC104912368	614	1316	1282	820	487	1138	collagen alpha-1(XI) chain-like
RBM27	1360	1064	1233	1033	1133	1138	RNA binding motif protein 27
LOC100539493	769	1165	783	1352	1172	1137	synapsin-3-like
ATAD1	1214	1069	1191	1050	1125	1136	ATPase family, AAA domain containing 1
HMOX2	1168	1158	1090	1000	976	1136	heme oxygenase (decycling) 1
DES1	989	1003	1001	1144	1067	1135	desmin
DCUN1D2	1060	1095	1084	998	1219	1135	DCN1, defective in cullin neddylation 1, domain containing 1
BCL2	1253	1118	1157	1095	955	1135	B-cell CLL/lymphoma 2
LOC104913009	1358	948	1336	1070	1224	1135	unconventional prefoldin RPB5 interactor 1-like
TRIP11	1377	1156	1248	1177	1282	1135	thyroid hormone receptor interactor 11
LOC104912358	1353	1096	1311	1001	1141	1135	ral guanine nucleotide dissociation stimulator-like 1
ZBED4	1403	1081	1347	1085	1325	1134	zinc finger, BED-type containing 4
CPT2	1213	1099	1063	1036	876	1134	carnitine palmitoyltransferase 1A (liver)
SNRPA1	1608	1132	1381	948	1056	1133	small nuclear ribonucleoprotein polypeptide A'
NUS1							
	1204	1222	1174	1046	1101	1133	nuclear undecaprenyl pyrophosphate synthase 1 homolog (S. cerevisiae)
TNKS1BP1	1394	1269	1259	1086	1190	1133	tankyrase 1 binding protein 1, 182kDa
LOC104913595	1602	1052	1343	1048	1164	1133	serine/threonine-protein kinase TAO3
GTF2E1	1158	991	1141	983	1138	1133	general transcription factor IIB

LOC100540056	1272	999	1153	987	1075	1132	lysozyme g-like
RNF6	1198	1083	1126	1049	1124	1132	ring finger protein (C3H2C3 type) 6
ZCCHC8	1141	1101	1102	1020	1034	1131	zinc finger, CCHC domain containing 8
SACM1L	1299	1156	1229	1018	1124	1131	SAC1 suppressor of actin mutations 1-like (yeast)
TNFRSF19	1175	824	1289	968	1108	1131	tumor necrosis factor receptor superfamily, member 19
SMIM13	1243	1158	1169	884	1109	1131	small integral membrane protein 13
GANC	902	973	992	1306	1441	1131	gigaxonin
ABAT	1148	984	1059	1171	1012	1131	4-aminobutyrate aminotransferase
GOSR2	1271	1110	1124	1016	1130	1131	golgi SNAP receptor complex member 1
LOC104911767	1276	968	1189	879	1007	1130	T-box brain protein 1-like
LOC100538719	1317	915	1257	1055	999	1130	fibrillin 3
KIAA0319L	1113	1068	1069	1137	1234	1129	KIAA0319 ortholog
SLC40A1							
LOC104912749	1129	1274	1097	1115	1114	1129	solute carrier family 40 (iron-regulated transporter), member 1
GNPTAB	725	1144	802	1129	891	1128	transcriptional enhancer factor TEF-3-like
LOC100541846	1209	1140	1164	1204	1006	1128	glucosamine-phosphate N-acetyltransferase 1
PNPLA8	1292	1105	1238	1236	1091	1128	olfactory receptor 1411-like
ATP6V1A	858	952	941	1084	873	1128	patatin-like phospholipase domain containing 8
HES6	1175	1190	1150	1030	1183	1128	ATPase, H+ transporting, lysosomal 70kDa, V1 subunit A
HMBS	1296	1163	1289	1123	937	1127	hes family bHLH transcription factor 4
GALNT11	1244	1034	1209	1035	1126	1127	homeobox containing 1
MLXIP	793	1160	837	940	1011	1126	polypeptide N-acetylglucosaminyltransferase 10
C7H2orf47	1213	1232	1193	1452	1256	1126	MLX interacting protein
DUSP3	1240	981	1125	942	883	1125	chromosome 7 open reading frame, human C21orf58
SLC25A5	1139	1035	1240	1152	1327	1125	dual specificity phosphatase 28
							solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 5
MEOX2	1578	1001	1319	866	972	1124	mesenchyme homeobox 2
RASGEF1C	1310	993	1296	960	1156	1124	RasGEF domain family, member 1C
RBSN	854	812	1017	1121	895	1124	rabenosyn, RAB effector
UBE2R2	1267	1115	1219	1066	1083	1123	ubiquitin-conjugating enzyme E2R 2
MAP4K3	1203	1036	1211	1027	1066	1122	mitogen-activated protein kinase kinase kinase 3
PDE12	1085	1076	1124	1148	1029	1122	phosphodiesterase 12
MRPS16	1221	893	1082	779	1076	1122	mitochondrial ribosomal protein S16
TBL3	1200	1238	1167	1074	1190	1122	transducin (beta)-like 3
WARS	1390	1008	1222	894	991	1121	tryptophanyl-tRNA synthetase
GOLT1B	1136	997	1202	867	976	1121	golgi transport 1A
MSL3	1432	1041	1371	953	1200	1121	male-specific lethal 3 homolog (Drosophila)
WDR83OS	1098	1092	1132	1083	1036	1121	WD repeat domain 83 opposite strand
RNASEH1	1000	1484	1063	1218	1129	1120	ribonuclease H1
ECHDC3	1119	1011	1138	955	1060	1119	enoyl CoA hydratase domain containing 2
MAD2L1	1067	1255	1077	1178	1181	1119	MAD2 mitotic arrest deficient-like 1 (yeast)
PROSC	1321	998	1251	951	1035	1119	proline synthetase co-transcribed homolog (bacterial)
TMEM230	1189	1023	1052	1016	1044	1119	transmembrane protein 230
NARF	1037	1175	1048	1091	1032	1118	nuclear prelamin A recognition factor
PBK	1145	1096	1153	1084	1231	1117	PDZ binding kinase
GAPVD1	1644	1136	1504	930	1066	1117	glyceraldehyde-3-phosphate dehydrogenase
GMPR	1288	1189	1296	1152	1207	1116	GDP-mannose pyrophosphorylase B
LOC100551225	1066	1124	1101	1193	1176	1116	deoxycytidine kinase-like
NEK4	1542	1217	1410	973	892	1116	NIMA-related kinase 4
USP38	1142	1134	1136	1104	1116	1116	ubiquitin specific peptidase 38
YOD1	1133	1144	1156	1174	1074	1116	YOD1 deubiquitinase
LOC100541609	1436	1047	1258	1036	1175	1114	putative E3 ubiquitin-protein ligase UBR7
GLOD4	1147	1148	1157	1015	1141	1114	glyoxalase I
GINS3	1345	1072	1373	1133	1340	1114	GINS complex subunit 2 (Psf2 homolog)
SMARCD1	1455	1116	1302	967	1105	1113	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 1
ASAH1	1214	1190	1181	1081	1077	1112	N-acylsphingosine amidohydrolase (acid ceramidase) 1
SNTA1	1192	1213	1356	1093	1138	1111	syntrophin, alpha 1
DOCK9	1197	1115	1083	1238	1136	1111	dedicator of cytokinesis 8
LOC104914032	1217	1120	1241	1280	1215	1111	uncharacterized LOC104914032
TMA16	1163	1075	1008	710	1344	1110	translation machinery associated 16 homolog (S. cerevisiae)
SORCS2	1310	1064	1291	966	1131	1110	soritin-related VPS10 domain containing receptor 2
LOC100539169	1174	1011	1257	1032	945	1109	serine/threonine-protein phosphatase 2A 55 kDa regulatory subunit B
LOC104913393	1161	1180	1142	1126	1100	1109	beta isoform
MAPKBP1	1032	1186	1059	1018	1114	1108	uncharacterized LOC104913393
TRAPPC8	986	1165	917	1242	913	1108	mitogen-activated protein kinase binding protein 1
WDR4	1165	1053	1159	1191	1118	1108	trafficking protein particle complex 8
NIPA2	1174	984	1240	959	1107	1107	WD repeat domain 4
CCPG1	1109	956	1163	949	1013	1107	non imprinted in Prader-Willi/Angelman syndrome 2
GABARAPL2	1047	1282	1198	1674	1071	1107	centriolar coiled coil protein 110kDa
LOC104916336	961	1246	1018	1277	1195	1106	GABA(A) receptor-associated protein like 1
MED12L	1524	852	1295	876	1267	1106	EH domain-containing protein 3 pseudogene
LTV1	1056	935	1034	1209	1184	1106	mediator complex subunit 12-like
LOC104913113	1202	943	1122	887	987	1106	LTV1 ribosome biogenesis factor
LOC100547441	544	876	497	1142	738	1106	E3 ubiquitin-protein ligase RNF123-like
SEC61A1	1212	894	1192	909	979	1104	probable low-specificity L-threonine aldolase 2
	1310	977	1305	888	984	1104	Sec61 alpha 1 subunit (S. cerevisiae)

ENOX2	1390	995	1235	970	1242	1104	enolase superfamily member 1
KIAA1217	887	1280	959	1185	902	1103	KIAA1211-like ortholog
JMJ04	1001	945	1055	1059	1057	1103	jumonji domain containing 1C
PIP4K2A	1349	1162	1202	1057	960	1103	phosphatidylinositol-5-phosphate 4-kinase, type II, alpha
CDK2	1573	1004	1319	760	968	1103	cyclin-dependent kinase 19
LOC100543320	1008	1176	1016	1066	1159	1102	cilia- and flagella-associated protein 43-like
ARIH1	1152	1059	1081	1125	1101	1102	ariadne RBR E3 ubiquitin protein ligase 1
PHF12	1361	1221	1296	1190	1253	1101	PHD finger protein 12
MXI1	863	1014	913	1385	1234	1101	MAX interactor 1, dimerization protein
RALGAPB	1317	1144	1228	1163	1146	1100	Ral GTPase activating protein, beta subunit (non-catalytic)
AGAP1							
	1122	1023	1097	1092	1100	1100	ArfGAP with GTPase domain, ankyrin repeat and PH domain 1
LOXL3	1128	1400	1208	1171	1414	1100	lysyl oxidase-like 3
LOC100547471	1127	1018	1147	992	971	1100	metalloendopeptidase homolog PEX-like
KLB	991	1214	991	1414	1338	1099	klotho
ARFGAP3	1288	933	1210	913	1053	1099	ADP-ribosylation factor GTPase activating protein 3
COG6	1018	843	1000	911	932	1099	component of oligomeric golgi complex 5
ABCG2							ATP-binding cassette, sub-family G (WHITE), member 2 (Junior blood group)
	1177	1020	1207	935	1138	1099	
TFB2M	1028	1065	991	929	1039	1099	transcription factor B2, mitochondrial
TRIM59	1300	968	1202	998	1054	1098	tripartite motif containing 59
SMDT1	998	1136	1004	1096	1160	1098	single-pass membrane protein with aspartate-rich tail 1
GLG1	1168	1068	1121	1161	1024	1098	GLE1 RNA export mediator
FAM53A	1084	1025	1142	1192	1133	1098	family with sequence similarity 49, member B
GLCE	1200	1012	1106	1029	1124	1098	glucocorticoid induced transcript 1
OAF	1622	961	1376	872	1191	1097	OAF homolog (Drosophila)
TTL5	1211	864	1220	1004	1022	1097	tubulin tyrosine ligase-like family, member 5
SEC23IP	1064	995	1075	1063	939	1096	SEC23 interacting protein
TBL1X	1290	1052	1165	1068	1057	1096	transducin (beta)-like 1X-linked
HMGXB3	1231	1107	1100	1150	1260	1096	high mobility group nucleosomal binding domain 3
ATP1B1	1279	1527	1160	1172	806	1096	ATPase, Na+/K+ transporting, beta 1 polypeptide
MRPS9	1182	1068	1162	954	986	1096	mitochondrial ribosomal protein S9
ERBB2	1293	1258	1231	1194	1076	1096	endoplasmic reticulum aminopeptidase 1
LOC100542017	1381	1013	1210	983	1112	1096	lysosomal acid lipase/cholesteryl ester hydrolase-like
GRAMD1B	791	799	773	1042	1136	1096	glutathione peroxidase 8 (putative)
P3H1	1221	1102	1245	900	1072	1095	prolyl 3-hydroxylase 1
NDUFA6							
	927	1100	906	948	965	1095	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 6, 14kDa
PM20D2	995	1147	1023	1759	847	1095	peptidase M20 domain containing 2
NELFCD	1080	947	1031	995	1019	1094	negative elongation factor complex member C/D
FLCN	1108	1010	1070	1001	1081	1094	flavin adenine dinucleotide synthetase 1
ERAL1	1260	1039	1130	1027	1116	1094	epiphykan
SUPV3L1	1120	1023	1023	968	928	1094	suppressor of var1, 3-like 1 (S. cerevisiae)
GIT2	1227	981	1150	1066	1137	1093	G protein-coupled receptor kinase interacting ArfGAP 1
CTBP2	1232	955	1263	990	1063	1093	C-terminal binding protein 1
TMEM50A	1202	973	1099	1065	1257	1093	transmembrane protein 50A
SLC33A1	1187	960	1065	893	972	1092	solute carrier family 33 (acetyl-CoA transporter), member 1
LOC100541794	966	838	965	862	955	1092	complexin-3-like
TCF20	1131	1010	1171	1125	1015	1092	transcription factor 20 (AR1)
MED17	1283	1058	1247	962	1000	1092	mediator complex subunit 17
PUS1	1155	840	1122	955	1098	1092	pseudouridylate synthase 1
PNPLA7	1244	1023	1111	992	1087	1091	patatin-like phospholipase domain containing 7
LOC104915598	1119	1389	1085	1200	843	1090	putative homeodomain transcription factor 2
RCOR1	1330	969	1328	1048	1095	1090	REST corepressor 1
CPD	1231	1116	1165	1246	1071	1090	carboxypeptidase B2 (plasma)
LOC104917005	1000	1328	927	1145	888	1090	microfibril-associated glycoprotein 4-like
LOC100540135	1284	1000	1105	1024	1031	1089	adenylate kinase isoenzyme 5
ASPSCR1	973	1117	1036	1002	904	1089	alveolar soft part sarcoma chromosome region, candidate 1
WIP1	982	1036	1087	1087	916	1089	WD repeat domain, phosphoinositide interacting 2
STOM	1069	1034	1138	1048	994	1089	stomatin
FTSJ3	1366	971	1177	973	1055	1089	FtsJ RNA methyltransferase homolog 2 (E. coli)
SEC22B							
	1284	1049	1250	847	1066	1088	SEC22 vesicle trafficking protein homolog B (S. cerevisiae)
LOC100549217	910	1134	925	945	895	1088	limbin-like
SLC5A6							
	1551	949	1295	900	1190	1088	solute carrier family 5 (sodium/multivitamin and iodide cotransporter), member 6
SNRPG	1291	1061	1224	989	1063	1087	small nuclear ribonucleoprotein polypeptide G
ARHGAP19	1200	921	1222	869	965	1087	Rho GTPase activating protein 19
MEF2D	921	961	957	1228	1018	1087	myocyte enhancer factor 2D
RNF145	1299	1193	1062	972	987	1086	ring finger protein 145
LOC100540365	836	1151	959	994	1174	1086	claudin-8-like
EIF2B4							
	1337	1028	1118	975	1122	1086	eukaryotic translation initiation factor 2B, subunit 3 gamma, 58kDa
ZMYM4	1256	1089	1187	1090	1273	1085	zinc finger, MYM-type 4
NUP133	1347	1051	1197	1006	990	1085	nucleoporin 133kDa
SKA2	1350	1178	1337	1053	1046	1084	spindle and kinetochore associated complex subunit 2
RPUSD3	1183	990	1143	957	1134	1084	RNA pseudouridylate synthase domain containing 3
ZC3H6	1268	1062	1233	1100	1024	1084	zinc finger CCHC-type containing 6
LOC104915533	1117	893	1202	897	957	1084	protein MANBAL-like

DDX54	1392	1138	1258	1129	1045	1083	DEAD (Asp-Glu-Ala-Asp) box polypeptide 52
HS1BP3	1195	976	1106	1058	1015	1083	heat-responsive protein 12
CTSC	1077	1250	1172	1698	1180	1083	cathepsin B
USP33	1189	1043	1145	1139	1093	1082	ubiquitin specific peptidase 33
KHDRBS1	1423	1204	1308	1111	1095	1081	keratocan
FAM8A1	1043	1015	1033	1049	1006	1080	family with sequence similarity 84, member B
KLHL11	1361	1095	1212	1065	1115	1080	kelch-like family member 10
LOC100550420	1332	1112	1248	1168	1366	1080	deleted in malignant brain tumors 1 protein-like
AHNAK2	1044	1130	1179	1187	1023	1079	AHNAK nucleoprotein 2
UTP3							UTP3, small subunit (SSU) processome component, homolog (S. cerevisiae)
	1299	1071	1143	995	1032	1079	
HS6ST1	1218	1060	1215	1002	1073	1079	heparan sulfate (glucosamine) 3-O-sulfotransferase 6
ECM2	998	1191	1266	1093	1025	1079	extracellular matrix protein 1
ATP11A	927	1113	1029	1024	1014	1078	ATPase, class VI, type 11A
IGJ	1041	684	1145	988	1316	1078	immunoglobulin mu binding protein 2
LOC100545080	795	2067	897	1844	713	1078	cullin-associated NEDD8-dissociated protein 1-like
LOC104912320	944	996	1039	948	1040	1077	parafibromin
TOR1AIP1	1345	1084	1201	970	964	1077	torsin A interacting protein 1
MRAS	1660	881	1489	968	1122	1076	muscle RAS oncogene homolog
MRPL42	1226	987	1073	955	1030	1076	mitochondrial ribosomal protein L42
PI16	884	1870	714	1220	1764	1076	peptidase inhibitor 16
LOC104909984	1229	838	1156	920	946	1076	14-3-3 protein theta pseudogene
WDFY1	1194	985	1182	993	1065	1076	WD repeat and FYVE domain containing 1
MRPS6	1193	880	1136	925	1222	1076	mitochondrial ribosomal protein S6
LOC104913734	563	1205	594	1516	940	1075	uncharacterized LOC104913734
MRPL1	1164	955	1144	1013	1050	1075	mitochondrial ribosomal protein L1
FAM49A	1317	1113	1314	1098	1116	1075	family with sequence similarity 46, member D
RABIF	1224	1092	1154	1052	1159	1075	RAB interacting factor
LOC100550423	1195	912	1218	900	1083	1074	acylglycerol kinase, mitochondrial-like
FAM210A	1190	1048	1135	1021	1118	1074	family with sequence similarity 20, member C
LOC104915088	903	834	956	1037	812	1073	vacuolar protein sorting-associated protein 13A-like
GLT8D1	1143	998	1192	814	897	1072	glycosyltransferase 1 domain containing 1
MME	753	1095	889	959	886	1072	membrane metallo-endopeptidase
PALMD	881	1264	964	1200	817	1072	palmdelphin
BPTF	1180	914	1133	1048	1039	1070	bromodomain PHD finger transcription factor
FBXW2	1153	936	1051	982	1032	1070	F-box and WD repeat domain containing 11
MRPL46	1265	921	1086	905	1099	1070	mitochondrial ribosomal protein L46
PKD1	1016	1276	1100	1429	1006	1070	polycystic kidney disease 1 (autosomal dominant)
LYPLA2	1481	1037	1290	984	1142	1070	lysophospholipase II
RIOK2	1002	886	1107	953	820	1070	RIO kinase 2
SPPL2B	1068	945	1065	1031	1037	1069	signal peptide peptidase like 2B
PKN2	1121	1147	1030	1179	951	1069	protein kinase N2
SAMD8	1026	1027	1060	1303	1179	1069	sterile alpha motif domain containing 8
PIGY	1134	1041	1028	985	1151	1069	phosphatidylinositol glycan anchor biosynthesis, class Y
LOC104915290	929	960	1139	1008	820	1068	hydroxysteroid dehydrogenase-like protein 2
PELO	1031	922	1101	931	921	1068	pelota homolog (Drosophila)
TAF7L							TAF7-like RNA polymerase II, TATA box binding protein (TBP)-associated factor, 50kDa
	1056	996	1157	908	961	1068	
FAM177A1	755	1202	803	1126	700	1068	family with sequence similarity 175, member B
DIP2C	1189	962	1168	824	931	1067	DIP2 disco-interacting protein 2 homolog B (Drosophila)
LOC104911242	975	1004	929	785	1025	1067	uncharacterized LOC104911242
CENPM	1307	959	1236	819	974	1067	centromere protein L
RAB24	916	997	891	959	1046	1067	RAB24, member RAS oncogene family
RFC3	1468	945	1284	824	921	1066	replication factor C (activator 1) 3, 38kDa
CCZ1	1364	948	1154	991	1072	1065	chaperonin containing TCP1, subunit 8 (theta)
JADE3	1382	1068	1293	1025	1122	1065	jade family PHD finger 1
SNF8	1145	1028	1146	946	1039	1065	SNF8, ESCRT-II complex subunit
EXTL1	909	1143	832	1136	824	1065	exostosin glycosyltransferase 2
HAUS1	1370	973	1439	856	764	1065	histone acetyltransferase 1
VSIG10	934	1016	974	980	1002	1065	V-set and immunoglobulin domain containing 10
TCEB3							
	1133	1017	1032	1006	1049	1065	transcription elongation factor B (SIII), polypeptide 3 (110kDa, elongin A)
PDXK	988	777	889	875	858	1064	pyridoxal (pyridoxine, vitamin B6) kinase
LOC100539811	992	1021	1072	1052	1051	1064	eyes absent homolog 4-like
FAM192A	1177	945	1135	906	981	1064	family with sequence similarity 189, member A2
LMTK2	1163	1013	1032	1103	925	1064	leiomodrin 3 (fetal)
IRAK2	1202	1009	1029	1020	1229	1063	interleukin-1 receptor-associated kinase 1 binding protein 1
ZCCHC6	1070	921	1110	1032	845	1063	zinc finger, CCHC domain containing 6
SPECC1							
	793	737	962	888	737	1061	sperm antigen with calponin homology and coiled-coil domains 1
MSL1	1156	1076	1112	966	1087	1061	male-specific lethal 1 homolog (Drosophila)
ADRBK1	1195	1108	1064	953	1033	1061	adrenergic, beta, receptor kinase 1
AGPAT3	967	856	1022	913	952	1061	1-acylglycerol-3-phosphate O-acyltransferase 3
INTS8	1190	1040	1232	1003	1079	1060	integrator complex subunit 7
POLR3E							
	1354	990	1226	1047	1182	1060	polymerase (RNA) III (DNA directed) polypeptide E (80kD)
LOC100548710							
	1176	922	1165	974	1041	1059	LIM and senescent cell antigen-like-containing domain protein 2
LOC104914888	925	960	1058	933	828	1058	uncharacterized LOC104914888

MLH3	957	834	917	939	985	1058	mutL homolog 3
NCOA6	1238	1002	1187	1109	1075	1057	nuclear receptor coactivator 6
LOC100540196	848	895	909	923	1005	1057	acyl-coenzyme A synthetase ACSM3, mitochondrial-like
KIF14	1102	966	1121	1045	742	1057	kinesin family member 13B
MFS2A	1248	967	1118	809	1179	1057	major facilitator superfamily domain containing 2A
LOC104915875	1032	1073	958	964	981	1056	dynactin subunit 2-like
NRBP1	1251	1067	1171	931	1019	1056	nuclear receptor binding protein 1
LOC100548946	887	1471	2241	682	748	1055	organic solute transporter subunit alpha-like
ANKRD11	1425	1157	1299	1235	1171	1055	ankyrin repeat domain 11
LRRC20	928	1076	969	904	889	1055	leucine rich repeat containing 20
SMOC2	942	1423	1047	1265	746	1055	SPARC related modular calcium binding 2
DPP8	1026	1040	1063	1052	1155	1054	dipeptidyl-peptidase 7
LOC104917102	977	1042	958	1015	1056	1054	eukaryotic translation initiation factor 3 subunit C-like
RSU1	1164	943	1061	1073	990	1054	Ras suppressor protein 1
ZBTB80S	1270	1096	1181	1087	1237	1054	zinc finger and BTB domain containing 8 opposite strand
ABCC1							
	960	960	1028	1146	1227	1053	ATP-binding cassette, sub-family C (CFTR/MRP), member 1
RBM12B	1160	934	1112	973	981	1053	RNA binding motif protein 12B
LOC104911348	1095	1046	1101	963	977	1053	WASH complex subunit 7-like
TTL12	1300	919	1167	901	1124	1052	tubulin tyrosine ligase-like family, member 12
YAP1	1431	1001	1398	1033	1103	1052	Yes-associated protein 1
SMYD5	1184	977	1107	1089	934	1052	SMYD family member 5
BCKDHB							
	827	1239	904	1152	889	1052	branched chain keto acid dehydrogenase E1, beta polypeptide
EXOC4	980	953	957	1006	1027	1051	exocyst complex component 3-like 4
OFD1	1054	1052	1095	1005	976	1051	oral-facial-digital syndrome 1
LOC100547598	1113	1182	1051	1019	1034	1051	ectonucleoside triphosphate diphosphohydrolase 8-like
UTP14A							
	1360	1037	1182	1079	1085	1051	UTP14, U3 small nucleolar ribonucleoprotein, homolog A (yeast)
LOC104914777	905	838	895	777	830	1050	ciliary neurotrophic factor receptor subunit alpha
MED18	1055	969	1157	982	827	1050	mediator complex subunit 18
RAB11FIP1	1070	907	1040	879	940	1049	RAB11 family interacting protein 1 (class I)
RAB20	833	871	940	1078	1095	1049	RAB20, member RAS oncogene family
TBC1D13	1132	906	1067	895	972	1049	TBC1 domain family, member 13
CDC20	1588	942	1448	983	1121	1049	cell division cycle 16
RB1CC1	814	944	1033	1273	810	1048	RB1-inducible coiled-coil 1
ANO5	1093	1089	1116	1209	1115	1048	anoctamin 5
NCK2	1022	935	1199	966	1075	1048	NCK adaptor protein 2
SLIT3	1911	1242	1558	1087	1627	1047	slit homolog 3 (Drosophila)
SEC61B	1369	1066	1215	800	929	1047	Sec61 beta subunit
ZDHHC5	1311	1216	1166	1048	1240	1047	zinc finger, DHHC-type containing 5
PLEKHO2	1134	1055	1029	1211	919	1047	pleckstrin homology domain containing, family O member 2
MPHOSPH6	1107	1030	1121	1056	1063	1046	M-phase phosphoprotein 6
MSH6	1363	1060	1275	834	946	1046	mutS homolog 6
FAM49B	1071	987	1150	1075	1028	1046	family with sequence similarity 49, member A
ITFG2	980	956	925	909	950	1046	itchy E3 ubiquitin protein ligase
SLC9A1							
	1307	946	1073	964	1048	1046	solute carrier family 9, subfamily A (NHE1, cation proton antiporter 1), member 1
LOC104912448	941	970	954	1095	869	1045	oxysterol-binding protein-related protein 9
DOHH	1175	1065	1134	1001	1159	1045	dedicator of cytokinesis 9
EMC4	1031	1025	898	879	808	1045	ER membrane protein complex subunit 3
KRR1	1179	932	1154	892	999	1045	KRIT1, ankyrin repeat containing
GJA1	1151	756	1109	847	1023	1045	G protein-coupled receptor kinase interacting ArfGAP 2
ANAPC16	1169	1266	1149	1174	1185	1045	anaphase promoting complex subunit 16
UBAP2L	1368	975	1142	1029	1114	1045	ubiquitin associated protein 2-like
ARHGEF7	1009	1003	1150	1117	977	1045	Rho guanine nucleotide exchange factor (GEF) 7
CSPG4	1344	1101	1200	994	1084	1045	casein kinase 2, alpha prime polypeptide
SLMO1	1151	776	1239	900	1420	1044	slowmo homolog 1 (Drosophila)
GFPT1	1312	877	1146	935	1067	1044	glucose-fructose oxidoreductase domain containing 2
AAMP	1141	1048	1153	992	1080	1044	angio-associated, migratory cell protein
PEX1	1058	846	965	928	1130	1044	peroxisomal biogenesis factor 1
LACTB	1016	969	1001	1058	1062	1043	lactation elevated 1
LOC100548555	1291	982	1103	909	1053	1043	cadherin-9-like
PLCD4	983	1028	1025	1194	1258	1043	phospholipase C, delta 4
LOC100545434	1010	1006	1042	1012	1073	1043	testis-specific serine/threonine-protein kinase 6
LTN1	1110	981	1122	1028	1015	1043	listerin E3 ubiquitin protein ligase 1
PAN3	1132	1033	1145	1195	1053	1042	PAN3 poly(A) specific ribonuclease subunit
GPBP1	960	1055	1114	994	847	1042	G patch domain containing 8
TAF3							
	1159	946	1092	912	1004	1042	TAF3 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 140kDa
CEPT1	1068	1009	972	894	922	1041	centrosomal protein 97kDa
PDCD11	1310	901	1133	899	1017	1040	programmed cell death 11
NECAB3	996	806	952	836	935	1040	N-terminal EF-hand calcium binding protein 3
MTA1	1252	1044	1189	998	1014	1040	metastasis associated 1
METTL21A	1194	1001	1158	927	956	1039	methyltransferase like 21A
EWSR1	1331	999	1207	1001	1035	1038	even-skipped homeobox 2
MRPL39	1170	917	1072	938	858	1038	mitochondrial ribosomal protein L39
SMIM19	1085	1126	1022	902	978	1038	small integral membrane protein 19
EZH2	1068	903	1061	889	876	1038	enhancer of zeste 1 polycomb repressive complex 2 subunit

KDM5B	895	1038	1000	1238	1029	1037	lysine (K)-specific demethylase 4B
LOC104917063	1220	1229	1140	1188	1167	1037	nuclear receptor subfamily 2 group F member 6-like
TFCP2	1251	969	1192	942	1026	1036	transcription factor CP2
C26H11orf52	1039	849	1244	964	1119	1036	chromosome 26 open reading frame, human C11orf1
PP2D1	1052	973	1161	969	997	1036	protein phosphatase 2C-like domain containing 1
FGF23	1026	829	740	1075	1078	1036	fibroblast growth factor 22
FDXR	1053	1058	978	877	765	1036	ferredoxin-fold anticodon binding domain containing 1
SCRIB	1320	1234	1229	1129	1246	1035	scribbled planar cell polarity protein
NSUN5	1419	1063	1205	820	1052	1035	NOP2/Sun domain family, member 5
LOC100547599	1244	1036	1144	843	1029	1035	zinc finger SWIM domain-containing protein 3-like
ELP3	969	900	899	876	900	1034	elongator acetyltransferase complex subunit 2
CCDC90B	1119	927	1097	940	987	1034	coiled-coil domain containing 89
LOC100548214	1142	951	1096	797	1199	1033	transmembrane protein C15orf27-like
RPAP1	1225	862	1162	891	1059	1033	RNA polymerase II associated protein 1
LOC100545821	935	1056	1024	1191	1058	1033	host cell factor 2-like
WDR91	1094	982	1095	909	1038	1033	WD repeat domain 91
ZC3H14	1174	919	1095	907	1122	1032	zinc finger CCHC-type containing 14
AMFR							
	1074	979	1076	1005	1117	1032	autocrine motility factor receptor, E3 ubiquitin protein ligase
PEX10	1140	915	1002	888	921	1032	peroxisomal biogenesis factor 10
LOC104913872							
	1433	956	1384	897	1179	1031	putative polypeptide N-acetylgalactosaminyltransferase-like protein 3
ARL8A	979	1176	1021	1021	1009	1031	ADP-ribosylation factor-like 8A
PAPLN	1062	1107	1047	1129	1110	1031	papilin, proteoglycan-like sulfated glycoprotein
RIMBP2	812	953	888	1195	1000	1031	RIMS binding protein 2
ANKLE2	1481	1082	1243	953	1099	1031	ankyrin repeat and LEM domain containing 2
RNF41	1234	1040	1125	1041	1139	1030	ring finger protein 41, E3 ubiquitin protein ligase
SPC25	1530	882	1362	872	987	1030	SPC25, NDC80 kinetochore complex component
SF3B6	1172	1010	1065	927	952	1030	splicing factor 3b, subunit 6, 14kDa
LRRC59	1187	972	1073	779	887	1029	leucine rich repeat containing 59
KAT7	1319	955	1254	984	1000	1029	K(lysine) acetyltransferase 6B
FRG1	1097	867	1127	897	908	1029	Fraser extracellular matrix complex subunit 1
TESK1	1644	1404	1403	1211	1097	1029	testis-specific kinase 1
GNP1	1130	1055	1105	966	1000	1029	glycoprotein M6B
MRPL27	1218	1099	1135	941	1174	1028	mitochondrial ribosomal protein L27
NUP98	1350	1023	1276	1034	1103	1028	nucleoporin 98kDa
PLVAP	1256	1029	1235	913	1040	1028	plasmalemma vesicle associated protein
NUP37	1269	841	1127	858	963	1027	nucleoporin 37kDa
HMMR	1339	877	1270	922	923	1027	HMG box domain containing 4
CSTF3	1063	948	1027	939	970	1026	cleavage stimulation factor, 3' pre-RNA, subunit 2, 64kDa
ASB14	653	816	808	1067	1265	1026	ankyrin repeat and SOCS box containing 14
TUBGCP2	1146	957	1086	1025	945	1026	tubulin, gamma complex associated protein 2
NUDT12							
	769	821	978	764	695	1026	nudix (nucleoside diphosphate linked moiety X)-type motif 12
CCDC86	1126	1012	1073	886	982	1025	coiled-coil domain containing 85C
OPHN1	1253	1251	1140	1160	1078	1025	oligophrenin 1
GPC1	1410	1019	1244	1058	1025	1025	GC-rich promoter binding protein 1
SLC35B4							
	1117	849	1117	804	1029	1024	solute carrier family 35 (UDP-xylose/UDP-N-acetylglucosamine transporter), member B4
EXOC6	966	1146	1014	1207	758	1024	exocyst complex component 5
CDK2AP1	1184	1037	1202	1094	1265	1024	cyclin-dependent kinase 2
BRWD1	969	1005	1090	1042	939	1024	BR serine/threonine kinase 2
LOC100549837	1053	888	1017	923	969	1023	rho GTPase-activating protein 20-like
LOC100551278							
	1140	999	1070	988	990	1023	serine/threonine-protein phosphatase 4 regulatory subunit 1-like
RNGTT	1040	774	999	781	868	1023	RNA guanylyltransferase and 5'-phosphatase
DTD1	966	1003	988	1001	946	1023	dual serine/threonine and tyrosine protein kinase
ADAL	966	905	1036	1047	1258	1023	adenosine deaminase-like
LOC104911363	1078	824	1002	875	885	1023	poly(A) RNA polymerase, mitochondrial-like
TATDN1	1153	980	1112	931	1001	1022	TatD DNase domain containing 1
CRHR2	766	957	888	884	686	1021	corticotropin releasing hormone receptor 1
TMBIM4	1098	971	1082	971	973	1021	transmembrane BAX inhibitor motif containing 4
WHAMM							
	756	819	882	1466	932	1021	WAS protein homolog associated with actin, golgi membranes and microtubules
SCCPDH	1276	1000	1196	998	1079	1021	saccharopine dehydrogenase (putative)
NEMF	1086	938	1065	1023	972	1020	nuclear export mediator factor
NFKB2							
	1376	988	1169	973	1205	1020	nuclear factor of kappa light polypeptide gene enhancer in B-cells 2 (p49/p100)
COG1	991	1064	948	1171	889	1020	cochlin
ASCC2	879	893	861	1004	868	1020	activating signal cointegrator 1 complex subunit 2
MSH2	1426	947	1273	879	972	1020	mutS homolog 2
LOC100541862	1075	983	1036	1027	997	1019	vascular endothelial growth factor receptor 2
LOC100544568	1190	898	1110	1026	1086	1019	endothelin B receptor-like
TP53I1	1213	846	1104	816	1122	1019	tumor protein p53 inducible protein 11
LOC100540532	1022	991	1065	1089	1006	1019	histamine H3 receptor-like
LOC104912086	1009	1120	950	1397	1255	1019	protein-methionine sulfoxide oxidase MICAL3-like
P2RY2	789	1171	700	953	1035	1018	purinergic receptor P2Y, G-protein coupled, 2
SQSTM1	874	930	963	1009	876	1017	sequestosome 1
ZNF652	1198	1032	1168	959	1094	1017	zinc finger protein 652

LOC104915160	1057	859	1064	828	844	1017	uncharacterized LOC104915160
RAB41	1011	966	950	916	929	1017	RAB41, member RAS oncogene family
C12H15orf40	1222	938	1198	949	1124	1017	chromosome 12 open reading frame, human C15orf39
POPD2	1357	1108	1150	1104	1196	1016	popeye domain containing 2
LIMS1	1155	877	1160	819	928	1016	LIM domain kinase 2
MPST	847	926	1013	846	974	1016	mercaptopyruvate sulfurtransferase
TAF13							TAF13 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 18kDa
THY1	1093	995	1237	976	1358	1016	Thy-1 cell surface antigen
ARHGAP32	1164	855	1039	754	888	1015	Rho GTPase activating protein 32
LRIG2	1001	880	1018	883	856	1014	leucine-rich repeats and immunoglobulin-like domains 2
MRPL48	1078	846	1067	888	934	1014	mitochondrial ribosomal protein L48
OGFOD1							
GON4L	1124	960	1015	869	977	1014	2-oxoglutarate and iron-dependent oxygenase domain containing 1
CTNNBIP1	1032	873	987	881	910	1014	golgi transport 1B
ZBTB44	1021	923	1107	1106	888	1014	catenin (cadherin-associated protein), beta 1, 88kDa
LOC100550182	1176	976	1148	1074	1090	1014	zinc finger and BTB domain containing 44
DEK	1185	952	1202	971	929	1013	uncharacterized LOC100550180
NUBP1	1178	913	1151	927	986	1013	delta(4)-desaturase, sphingolipid 2
LOC104914768	1055	923	969	993	941	1013	nucleotide binding protein 1
FILIP1L	784	1985	700	1111	900	1012	uncharacterized LOC104914768
GGA3							filamin A interacting protein 1
AFF4	1233	990	1186	1169	1057	1012	golgi-associated, gamma adaptin ear containing, ARF binding protein 2
LOC100550735	891	1149	1001	1254	910	1012	AF4/FMR2 family, member 4
GLT8D2	1089	964	1049	866	1003	1011	centrosomal protein of 85 kDa-like
GTF2E2	1103	970	1152	920	1027	1011	glycosyltransferase 8 domain containing 1
MVP	1012	1092	955	1096	1093	1011	general transcription factor IIE, polypeptide 1, alpha 56kDa
TWSG1	1303	1074	1240	895	991	1011	major vault protein
C10H1orf27	1184	910	1090	807	883	1010	twisted gastrulation BMP signaling modulator 1
MTUS1	865	962	848	975	951	1010	chromosome 10 open reading frame, human C1orf228
UBR2	1071	980	1055	1121	1070	1010	microtubule associated tumor suppressor 1
CNOT2	1085	975	1117	1020	969	1009	ubiquitin protein ligase E3 component n-recognin 2
RNF34	1205	1038	1120	1042	1127	1009	CCR4-NOT transcription complex, subunit 11
CENPH	1319	854	1207	759	839	1009	ring finger protein 34, E3 ubiquitin protein ligase
SDF2	1028	861	1061	855	1111	1009	centromere protein F, 350/400kDa
CHN2	986	788	1127	882	782	1008	stromal cell-derived factor 2
SIK1	1329	1003	1156	1041	933	1008	charged multivesicular body protein 7
AACS	1107	574	1147	649	764	1008	salt-inducible kinase 1
STARD13	1048	944	1065	1056	787	1007	acetoacetyl-CoA synthetase
KAZALD1	1433	946	1230	609	669	1007	StAR-related lipid transfer (START) domain containing 13
NRIP1	797	707	847	962	942	1006	katanin p80 subunit B-like 1
PTPLAD1	1285	1025	1088	918	1124	1006	nuclear receptor interacting protein 1
LOC104912254	1112	928	1153	858	989	1006	protein tyrosine phosphatase-like A domain containing 1
YLP1M1	1222	992	1097	1042	1082	1006	uncharacterized LOC104912254
EP300	1095	970	1167	1109	1056	1005	YLP motif containing 1
PEX5	804	911	877	895	942	1005	eomesodermin
SH3RF3	1417	992	1372	963	1063	1005	peroxisomal biogenesis factor 5
MRPL47	1154	1016	1099	900	952	1003	SH3 domain containing ring finger 3
QDPR	1036	811	985	825	1082	1003	mitochondrial ribosomal protein L47
CSH1orf31	1300	1025	1091	838	981	1003	quinoid dihydropteridine reductase
SETDB1	1024	1081	1018	1129	971	1003	chromosome 5 open reading frame, human C11orf24
WDR12	1316	984	1092	943	901	1002	SET domain, bifurcated 1
DDX6	997	916	1002	1023	1031	1002	WD repeat domain 12
LOC104910862	1162	1040	1207	977	1012	1002	DEAD (Asp-Glu-Ala-Asp) box polypeptide 59
ZBTB18	1350	950	1271	1063	1075	1002	uncharacterized LOC104910862
IKBKB							zinc finger and BTB domain containing 18
FAM189A2	1045	942	956	880	956	1001	inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase complex-associated protein
TBC1D23	1153	985	1279	1158	1118	1001	family with sequence similarity 189, member A1
NSUN2	922	932	1040	1058	907	1001	TBC1 domain family, member 23
BLOC154	1230	841	1025	835	1047	1000	NOP2/Sun RNA methyltransferase family, member 2
NBAS	986	859	959	847	963	1000	biogenesis of lysosomal organelles complex-1, subunit 4, cappuccino
LOC100549289	1043	849	1071	1003	898	999	neuroblastoma amplified sequence
NOL12	1087	992	1012	973	1077	999	titin-like
TBC1D15	1111	969	977	816	975	999	nucleolar protein 12
UBE2K	853	899	1037	1137	929	998	TBC1 domain family, member 15
SMIM15	1084	881	1111	972	1061	998	ubiquitin-conjugating enzyme E2K
HEATR5A	1231	965	1105	881	932	998	small integral membrane protein 15
PRCC	1139	1022	1126	1128	971	998	HEAT repeat containing 1
LSM7	1145	926	1108	970	1052	998	papillary renal cell carcinoma (translocation-associated)
LOC100546100	1306	902	1311	815	999	997	LSM7 homolog, U6 small nuclear RNA associated (S. cerevisiae)
USP6NL	1077	975	1081	889	939	997	dystrobrein alpha-like
GNAI1	794	954	925	1096	880	997	USP6 N-terminal like
NDUFA2	1305	924	1285	940	1057	997	guanine nucleotide binding protein (G protein), alpha 14
	1011	1207	954	1012	1086	996	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 2, 8kDa

LOC104912068	1222	1012	1012	1159	1187	996	protein FAM53B-like
ARMC1	1030	852	1080	920	1074	995	armadillo repeat containing 1
CUEDC2	1123	857	1121	882	1015	995	CUE domain containing 1
NUDCD3	999	981	926	993	1008	995	NudC domain containing 3
CGGBP1	1105	1006	1109	989	1123	994	glycoprotein hormones, alpha polypeptide
GLUL	619	946	869	1473	927	994	glutamate dehydrogenase 1
LOC100550717	976	818	955	835	862	993	lethal(3)malignant brain tumor-like protein 4
LOC104910361							
	950	949	992	952	914	993	brefeldin A-inhibited guanine nucleotide-exchange protein 1-like
ITGA7	760	959	837	784	931	993	integrin, alpha 6
AGPAT9	769	1147	916	1094	961	993	1-acylglycerol-3-phosphate O-acyltransferase 9
LOC100548454	1160	1019	969	1187	1145	993	latrophilin-3
GDE1	1123	916	1050	854	1127	992	ganglioside induced differentiation associated protein 2
LOC104911750	983	736	979	938	1027	992	obg-like ATPase 1
MRGBP	907	844	946	731	743	992	MRG/MORF4L binding protein
SRM	1305	903	1106	645	813	991	spermidine synthase
OXS1	1118	1237	1103	1083	975	991	oxidative stress responsive 1
PROSER1	1045	914	1022	974	973	991	proline and serine rich 1
HPS6	1793	1220	1581	1189	1405	991	Hermansky-Pudlak syndrome 5
RCHY1							ring finger and CHY zinc finger domain containing 1, E3 ubiquitin protein
	955	901	971	864	851	990	ligase
C11H3orf58	1090	983	1135	1023	1055	990	chromosome 11 open reading frame, human C3orf33
EIF4E2	1120	920	1045	862	902	990	eukaryotic translation initiation factor 4E family member 1B
ACKR3	876	1243	872	1111	1213	989	atypical chemokine receptor 3
C11H18orf32	987	876	1166	814	886	989	chromosome 10 open reading frame, human C1orf52
TAF1A							TATA box binding protein (TBP)-associated factor, RNA polymerase I, A,
	1136	1036	1170	1032	982	988	48kDa
LOC104910145	1093	627	908	530	797	988	tubulin beta chain
METTL14	1042	1000	1031	875	973	988	methyltransferase like 14
ULK2	955	888	1066	959	1059	988	unc-51 like autophagy activating kinase 2
DBR1	1135	979	1053	904	1011	987	drebrin-like
LOC104910274	980	934	993	926	848	986	uncharacterized LOC104910274
LRRC47	962	972	923	829	917	986	leucine rich repeat containing 47
C1QTNF2	1250	1055	1195	1091	1146	986	C1q and tumor necrosis factor related protein 1
LOC100539601	1071	1051	1081	1065	1033	986	carbonic anhydrase 3-like
EAF1	1055	961	1005	959	959	985	E4F transcription factor 1
ECHDC2	832	907	849	864	853	985	enoyl CoA hydratase 1, peroxisomal
CTS8	1014	963	955	1211	1082	985	cathepsin A
CFH	1331	1055	1324	1030	1207	985	craniofacial development protein 1
CEP170	1183	902	1119	983	1078	984	centrosomal protein 164kDa
ISCA2	979	927	1009	844	998	984	iron-sulfur cluster assembly 1
LOC100542393	1073	1104	1009	1348	1050	983	G patch domain-containing protein 1-like
LSG1	1002	825	1010	834	904	983	large 60S subunit nuclear export GTPase 1
COQ3	1055	993	1046	1052	980	983	coenzyme Q2 4-hydroxybenzoate polyprenyltransferase
WDR44	1170	986	1094	1022	1018	982	WD repeat domain 44
ZNF609	1310	1144	1142	1087	1169	982	zinc finger protein 609
PSMB5	1105	945	1039	971	1121	982	proteasome (prosome, macropain) subunit, beta type, 5
ARHGDI8	1106	1036	984	874	883	980	Rho GDP dissociation inhibitor (GDI) beta
DR1	1033	871	1032	881	921	980	DEAQ box RNA-dependent ATPase 1
TXLNA	1183	982	1101	939	1041	980	taxilin alpha
STRIP1	1144	975	1107	970	1059	980	striatin interacting protein 1
COMP	953	1207	1772	1004	2229	979	COMM domain containing 9
FASN	1047	560	1016	677	890	979	Fas ligand (TNF superfamily, member 6)
CHMP6	1251	1006	1154	1008	1140	979	charged multivesicular body protein 5
MED14	1056	823	1081	889	949	979	mediator complex subunit 14
CPNE1	918	957	934	897	1040	978	carboxypeptidase N, polypeptide 1
ICT1	1065	1017	983	902	907	978	inducible T-cell co-stimulator ligand
DCAF8	1107	1014	1007	1071	1073	978	DDB1 and CUL4 associated factor 7
LOC100543834	1258	895	1095	975	976	978	adseverin-like
RAD50	1219	842	1128	933	914	978	RAD50 homolog (S. cerevisiae)
HINT3	801	843	843	852	922	978	histidine triad nucleotide binding protein 1
MMP2							matrix metalloproteinase 2 (gelatinase A, 72kDa gelatinase, 72kDa type
	1092	911	988	1184	1076	978	IV collagenase)
SPCS1	1144	1109	1042	892	917	977	signal peptidase complex subunit 1 homolog (S. cerevisiae)
DCBLD1	933	1140	972	1307	662	977	dephospho-CoA kinase domain containing
KANSL3	1278	1184	1187	1085	1043	977	KAT8 regulatory NSL complex subunit 1-like
CSRP1	1310	1269	1171	1116	1266	977	cysteine-serine-rich nuclear protein 3
METTL16	1023	946	976	1007	946	977	methyltransferase like 16
LOC104914605	1424	944	1244	1012	988	976	importin subunit beta-1
C1H11orf73	972	940	1051	917	991	976	chromosome 1 open reading frame, human C11orf70
RBM25	1052	874	933	867	891	976	RNA binding motif protein 25
JPH2	1235	962	1144	1092	1320	976	Josephin domain containing 1
TPD52L2	998	863	962	919	964	976	tumor protein D52-like 2
NOB1	1122	870	1011	819	954	976	NIN1/RPN12 binding protein 1 homolog (S. cerevisiae)
SELENBP1	800	1463	854	1542	1046	975	selenium-binding protein 1
XPR1	1002	981	974	1073	969	975	xenotropic and polytropic retrovirus receptor 1
UFL1	973	951	978	926	869	975	UFM1-specific ligase 1
LOC104916015	1335	706	1190	834	977	975	T-complex protein 1 subunit delta-like
JADE1	948	960	939	965	1076	974	iodotyrosine deiodinase

TAB3	1142	963	1090	984	920	974	TGF-beta activated kinase 1/MAP3K7 binding protein 3
C1H2orf49	1032	948	1060	953	975	974	chromosome 1 open reading frame, human C2orf40
TEAD3	1105	1035	1009	997	1028	974	TEA domain family member 3
ABCC8							
LARP1	949	956	921	1177	1069	974	ATP-binding cassette, sub-family C (CFTR/MRP), member 8
MRPS21	1149	876	1059	1007	1093	974	lysosomal protein transmembrane 5
LOC100546141	1035	1167	998	861	938	973	mitochondrial ribosomal protein S21
RREB1	930	913	1060	948	1015	973	uncharacterized LOC100546136
ACTR2	941	826	943	941	906	973	ras responsive element binding protein 1
TMEM248	1204	770	1057	811	974	973	ARP2 actin-related protein 2 homolog (yeast)
PYCR1	1079	936	975	916	907	972	transmembrane protein 248
SOAT1	861	854	871	678	847	972	pyrroline-5-carboxylate reductase-like
TBCD	1108	904	923	796	755	972	sterol O-acyltransferase 1
IQSEC1	876	846	919	940	901	972	tubulin folding cofactor D
SPG21	1099	904	1031	943	926	972	IQ motif containing GTPase activating protein 2
CASK	1108	907	1146	972	907	972	spastic paraplegia 21 (autosomal recessive, Mast syndrome)
DNAJB5	1012	825	1048	937	893	971	cancer susceptibility candidate 5
LOC100538440	986	1331	1076	1053	962	971	DnaJ (Hsp40) homolog, subfamily B, member 4
ADAMTS15	1066	1215	891	975	934	971	proto-oncogene Mas-like
HRASL5	1152	1044	1031	968	999	971	ADAM metalloproteinase with thrombospondin type 1 motif, 15
ANKRA2	803	1101	791	1028	788	971	Harvey rat sarcoma viral oncogene homolog
C1GALT1	875	804	953	758	725	970	ankyrin repeat, family A (RFXANK-like), 2
LOC104915988	1236	898	1110	792	967	970	C1D nuclear receptor corepressor
PITHD1	1174	1148	1088	1038	1037	970	UV excision repair protein RAD23 homolog A-like
AIF1L	962	1078	972	1008	978	970	PITH (C-terminal proteasome-interacting domain of thioredoxin-like)
BRI3	1151	1018	1100	973	1299	970	domain containing 1
GAB1	1013	1112	993	880	870	970	allograft inflammatory factor 1-like
LOC104910673	920	969	969	954	971	969	BRF2, RNA polymerase III transcription initiation factor 50 kDa subunit
TARBP1	914	956	924	990	1339	969	glucosidase, alpha; acid
PINK1	874	993	915	924	861	968	electrogenic sodium bicarbonate cotransporter 1-like
TRPM7	980	1036	1023	1069	885	968	TAR (HIV-1) RNA binding protein 1
MALSU1	1220	952	1147	892	1005	968	PTEN induced putative kinase 1
RGMB	934	856	930	829	935	968	transient receptor potential cation channel, subfamily M, member 7
LOC104912625	1041	865	950	916	828	968	mitochondrial assembly of ribosomal large subunit 1
GSK3B	963	922	963	824	829	967	repulsive guidance molecule family member b
LOC104911503	941	843	938	946	977	967	disks large homolog 1-like
TAF5L	995	857	1068	889	925	967	germ cell associated 2 (haspin)
SYT14	1084	1031	1027	841	978	965	TBC1 domain family member 5-like
ZNF622	763	826	769	1051	746	965	TAF5-like RNA polymerase II, p300/CBP-associated factor (PCAF)-
LOC104915082	1122	869	1024	865	937	965	associated factor, 65kDa
LOC100544679	936	758	910	808	839	964	synaptotagmin XIV
SLC20A2	1105	912	983	809	928	964	zinc finger protein 622
CDC123	702	1480	907	1339	816	963	UPF0586 protein C9orf41-like
RNASET2	1113	869	1109	895	984	963	uncharacterized LOC100544657
MARVELD3	1167	849	1165	920	1146	963	solute carrier family 20 (phosphate transporter), member 2
XPO4	979	871	916	953	1016	963	codanin 1
POLD2	1143	872	1067	883	933	963	ribonuclease T2
LOC104915312	1138	1018	988	880	952	962	MARVEL domain containing 3
HECTD2	901	788	954	770	706	962	exportin 4
POLR2I	1069	908	1221	1003	936	962	polymerase (DNA directed), delta 2, accessory subunit
AK2	891	1010	925	884	834	962	phospholipase A-2-activating protein
RPP25L	1247	898	1132	825	1028	962	HECT domain containing E3 ubiquitin protein ligase 1
ATP2B4	987	935	1003	771	767	961	polymerase (RNA) II (DNA directed) polypeptide I, 14.5kDa
KCNT1	1224	1117	1112	1038	1047	961	adenylate kinase 2
LOC100544105	753	857	866	1301	889	961	ribonuclease P/MRP 25kDa subunit-like
TMEM194B	1038	885	1120	924	950	960	ATPase, Ca++ transporting, plasma membrane 4
ATP13A1	1072	825	958	778	942	960	potassium voltage-gated channel, delayed-rectifier, subfamily S,
NAA35	1183	992	1071	1003	971	960	member 3
GPSM2	777	765	1016	881	688	959	sulfate transporter
TTC38	1262	788	1092	804	889	959	transmembrane protein 194B
ATP6V0D1	1084	879	993	936	1000	959	ATPase type 13A1
C2H6orf57	978	938	961	884	1003	959	N(alpha)-acetyltransferase 35, NatC auxiliary subunit
SOS2	904	856	869	750	970	959	G-protein signaling modulator 1
RNPEPL1	1051	953	950	1081	1071	959	tetratricopeptide repeat domain 38
PLXNA2	1274	958	1180	1037	1249	958	ATPase, H+ transporting, lysosomal 38kDa, V0 subunit d1
LOC104913411	1038	911	1061	894	818	958	chromosome 2 open reading frame, human C6orf211
SPRYD7	730	878	953	1058	938	958	son of sevenless homolog 2 (Drosophila)
LOC100540564	958	858	932	848	985	958	arginyl aminopeptidase (aminopeptidase B)-like 1
MEIS1	1095	1100	992	958	1006	958	plexin A2
	1131	897	1105	818	1176	958	TOM1-like protein 2
							SPRY domain containing 7
							CMP-N-acetylneuraminate-beta-galactosamide-alpha-2,3-
							sialyltransferase 2-like
							Meis homeobox 1

RTCA	1120	902	1108	874	939	957	RNA 3'-terminal phosphate cyclase
ARHGAP24	1021	992	1140	1062	1003	957	Rho GTPase activating protein 24
EGFR	1148	1046	1166	1103	1067	957	EGF-like, fibronectin type III and laminin G domains
ATRAID	1014	1034	1025	840	973	957	all-trans retinoic acid-induced differentiation factor
SLC39A6	773	918	773	990	904	956	solute carrier family 39 (zinc transporter), member 6
VPRBP	1136	966	1112	1017	938	956	Vpr (HIV-1) binding protein
TTF1	969	848	930	785	864	956	transcription termination factor, RNA polymerase I
LOC100549733	1019	930	1031	1032	1131	956	dual specificity protein phosphatase CDC14A-like
ZKDC	1229	1014	1092	871	981	956	ZKD family zinc finger C
CPOX	916	901	935	974	998	956	carboxypeptidase O
LOC104913903	943	915	1036	1048	1018	956	DDB1- and CUL4-associated factor 6-like
SLU7	774	884	803	989	730	955	SLU7 splicing factor homolog (S. cerevisiae)
FBN2	880	1018	1041	835	626	955	fibrillin 1
PTBP2	1071	965	1051	868	775	955	polypyrimidine tract binding protein 2
SLC9A3R2							solute carrier family 9, subfamily A (NHE3, cation proton antiporter 3), member 3 regulator 2
CP	1034	1088	1073	991	980	954	cytochrome c oxidase subunit III
PPP6C	853	838	942	966	974	954	protein phosphatase 6, catalytic subunit
C1H2orf40	1088	904	1011	888	943	954	chromosome 1 open reading frame, human C22orf23
LOC104912883	1175	1015	1300	744	779	954	uncharacterized LOC104912883
PPTC7	950	965	937	1004	994	953	PTC7 protein phosphatase homolog (S. cerevisiae)
WBP2	852	907	810	853	1084	953	WW domain binding protein 2
RBM45	955	789	900	861	929	953	RNA binding motif protein 45
NUP214	1030	857	1019	860	918	952	nucleoporin 214kDa
LOC100544649	1177	858	1037	830	900	952	stromelysin-1-like
GEMIN2	888	710	916	784	797	952	GTP binding protein overexpressed in skeletal muscle
FRMD5	937	860	926	901	941	952	FERM domain containing 4B
TM2D1	674	1009	683	1022	1250	951	TM2 domain containing 1
ACP2	999	922	1004	927	1002	951	acid phosphatase 2, lysosomal
LSMEM1	1145	926	1000	943	849	951	leucine-rich single-pass membrane protein 1
QRS1	995	1229	1146	1056	1136	951	glutamyl-tRNA synthase (glutamine-hydrolyzing)-like 1
LOC104913032	938	849	869	902	924	951	breast cancer anti-estrogen resistance protein 1
RNF38	1315	1029	1140	928	1123	951	ring finger protein 38
BCAS2	985	846	1015	862	832	950	breast carcinoma amplified sequence 2
LOC104914465	988	956	907	902	988	950	myogenin pseudogene
TMEM161B	975	739	1138	972	988	950	transmembrane protein 161B
TXNRD2	908	891	896	833	806	950	thioredoxin reductase 2
RANBP9	906	857	932	993	810	950	RAN binding protein 9
RNF123	958	962	930	1037	1044	949	ring finger protein 123
SP1	979	994	913	1048	1035	949	Sp1 transcription factor
LMO4	1156	1095	1091	1077	1067	949	LIM domain only 3 (rhombotin-like 2)
SF3B5	1263	1094	1151	1072	1025	948	splicing factor 3b, subunit 5, 10kDa
PECR	1156	990	996	897	983	948	peroxisomal trans-2-enoyl-CoA reductase
TPCN1	855	902	894	903	846	948	two pore segment channel 1
UBXN10	1056	941	1013	841	912	947	UBX domain protein 10
GLRX	932	911	935	815	956	947	glycine receptor, beta
MICAL2	715	794	849	619	687	947	MICAL-like 2
LOC100538860	1042	1061	970	969	796	946	5-phosphohydroxy-L-lysine phospho-lyase
SLC22A16	1115	957	1069	969	1082	946	solute carrier family 22 (organic cation/carnitine transporter), member 16
ORC3	988	829	940	746	770	946	origin recognition complex, subunit 3
C10H1orf123	1046	831	1050	806	852	946	chromosome 10 open reading frame, human C10orf112
CARHSP1	846	925	987	875	990	946	calcium responsive transcription factor
RNF208	837	803	910	898	1111	945	ring finger protein 208
FAM129B	803	625	713	711	1105	945	family with sequence similarity 129, member A
MSMO1	1281	1042	1038	806	1071	945	methylsterol monooxygenase 1
RBL2	1210	587	1533	565	833	944	retinoblastoma-like 2
TMUB1	880	885	880	982	901	943	transmembrane and ubiquitin-like domain containing 1
LOC100538813	1086	1055	981	828	984	943	FRAS1-related extracellular matrix protein 1-like
LOC100547061	960	888	967	844	904	943	ribonuclease CL2
CRLS1	1065	843	991	872	931	943	cytokine receptor-like factor 3
ATXN2	945	895	1006	851	827	943	ataxin 2
TIMM22	1086	800	989	985	930	941	translocase of inner mitochondrial membrane 22 homolog (yeast)
LOC100549193	933	1063	894	952	992	941	complement C4-like
XPO6	937	836	764	962	1060	941	exportin 6
TTC14	981	886	987	804	887	941	tetratricopeptide repeat domain 14
SSBP1	909	818	910	920	747	940	single-stranded DNA binding protein 1, mitochondrial
LOC104913944	1277	851	1211	801	1011	940	uncharacterized LOC104913944
LOC104910388	713	641	838	684	660	940	NEDD4-like E3 ubiquitin-protein ligase WWP1
LOC100541523	515	915	667	1260	971	940	metal-response element-binding transcription factor 2-like
KIAA1279	990	1147	988	934	870	940	KIAA1217 ortholog
LOC100550291	1080	988	1065	863	1011	940	heat shock factor protein 3
UAP1L1	887	1081	967	1058	961	939	UDP-N-acetylglucosamine pyrophosphorylase 1 like 1
LOC104909642	1163	736	1076	734	1014	939	CSC1-like protein 2
CLIP1	1049	1009	1000	905	970	939	clathrin interactor 1
NT5C3B	1047	956	1040	988	896	939	5'-nucleotidase, cytosolic IIIB
NBEAL1	1256	924	1123	910	1244	939	neurobeachin-like 1
CROT	882	945	955	1040	851	939	ciliary rootlet coiled-coil, rootletin
	1052	1231	1097	1170	915	939	

MED12	1157	875	1008	1013	1020	939	mediator complex subunit 12
MDFIC	1055	1077	1049	1048	890	938	MyoD family inhibitor domain containing
SYF2	817	817	805	782	708	938	SYF2 pre-mRNA-splicing factor
IGFBP3	882	849	925	886	1017	937	insulin-like growth factor binding protein 2, 36kDa
LOC100550466							
SLC25A1	862	733	900	753	891	937	ubiquinol-cytochrome-c reductase complex assembly factor 1-like solute carrier family 25 (mitochondrial carrier; citrate transporter), member 1
MMS19	1088	861	1083	796	968	936	MMS19 nucleotide excision repair homolog (S. cerevisiae)
MED10	1221	959	1034	831	987	936	mediator complex subunit 10
LOC100547397	984	965	1022	930	884	936	transmembrane protein 180-like
LOC100550826	1031	551	1100	679	884	936	phospholipid-transporting ATPase ID-like
PPP2R5E	1076	890	1045	790	861	936	
WDR5	1070	938	1047	881	874	935	protein phosphatase 2, regulatory subunit B', epsilon isoform
LOC104917367	1250	812	1064	756	906	935	WD repeat domain 5
DYNLT3	1040	1142	1044	1038	1156	935	cytochrome b-c1 complex subunit 9
TVP23B	1034	861	967	849	971	935	dynein, light chain, Tctex-type 1
PLD1	920	770	933	654	872	934	Golgi apparatus membrane protein TVP23 homolog B
NAV1	1074	1048	1065	975	983	934	phospholipase D1, phosphatidylcholine-specific
SF3B4	1153	922	979	860	913	934	neuron navigator 1
LOC100548025	1193	904	994	956	930	934	splicing factor 3b, subunit 4, 49kDa
ZBTB2	915	726	899	857	961	934	olfactory receptor 52B2-like
PDK4	1320	1001	1144	886	960	934	zinc finger and BTB domain containing 2
PGRMC2	446	5261	1178	7971	302	934	pyruvate dehydrogenase kinase, isozyme 4
VEZF1	1038	844	1051	790	852	933	progesterone receptor membrane component 2
DIMT1	1001	908	972	962	871	933	vascular endothelial zinc finger 1
AMOTL2	976	716	967	745	744	933	digestive organ expansion factor homolog (zebrafish)
BAZ2B	840	931	925	988	812	933	angiomotin like 2
REST	804	890	954	975	865	933	bromodomain adjacent to zinc finger domain, 2B
EPC1	876	795	972	945	898	933	RE1-silencing transcription factor
NELFB	964	905	974	927	894	933	erythrocyte membrane protein band 4.2
CCR7	977	947	1045	859	930	933	negative elongation factor complex member B
AUP1	508	726	573	753	619	932	chemokine (C-C motif) receptor 6
HDCC2	1069	953	997	804	920	932	ancient ubiquitous protein 1
CLASP1	1085	861	1071	719	944	932	histidine decarboxylase
LOC100550794	875	872	818	944	921	932	CDC28 protein kinase regulatory subunit 2
NUDT7	988	980	884	988	952	932	transmembrane protein 14C-like
FAHD2A	887	928	875	902	774	932	nudix (nucleoside diphosphate linked moiety X)-type motif 7
MUT	857	1038	903	833	856	931	fumarylacetoacetate hydrolase domain containing 1
LOC104914039	882	1008	796	905	890	931	methylmalonyl CoA mutase
ITCH	936	773	991	771	695	931	uncharacterized LOC104914039
ITSN1	1007	998	996	979	953	930	ISY1 splicing factor homolog (S. cerevisiae)
DIEXF	989	886	949	1045	984	930	inositol 1,4,5-trisphosphate receptor interacting protein
GOLGA1	1034	760	981	798	919	930	death inducer-obliterater 1
MRPS35	937	887	966	850	868	930	glucosamine (N-acetyl)-6-sulfatase
SQLE	944	846	1034	837	822	930	mitochondrial ribosomal protein S35
PAF1	940	351	991	490	655	929	squalene epoxidase
LOC104916381	1100	950	1013	924	933	929	Paf1, RNA polymerase II associated factor, homolog (S. cerevisiae)
UPF2	1051	710	1010	772	991	929	protein syndesmos pseudogene
CENPF	1107	884	1046	968	974	929	UPF2 regulator of nonsense transcripts homolog (yeast)
BLZF1	1061	755	1051	883	776	928	centromere protein E, 312kDa
LOC104913369	939	781	903	809	911	928	basic leucine zipper nuclear factor 1
SNX7	1243	860	1162	1029	932	928	ubiquitin carboxyl-terminal hydrolase 7-like
RFX7	1071	947	1035	927	872	928	sorting nexin 7
PTGES3L	1166	881	1096	1033	936	928	regulatory factor X, 7
ECE1	835	1019	925	841	897	927	prostaglandin H synthase 3 (cytosolic)-like
GM2A	1227	1121	1098	988	1035	927	ecdysoneless homolog (Drosophila)
DBN1	864	813	718	696	885	927	glyoxylate reductase 1 homolog (Arabidopsis)
NDRG3	1195	871	948	741	902	927	diazepam binding inhibitor (GABA receptor modulator, acyl-CoA binding protein)
CAMSAP1	910	834	875	899	912	927	NDRG family member 3
LOC100543391	954	927	937	929	940	927	calcium modulating ligand
PSMF1	882	784	868	941	853	926	solute carrier family 2, facilitated glucose transporter member 11-like
EBAG9	791	922	869	923	852	925	proteasome (prosome, macropain) inhibitor subunit 1 (Pi31)
CDC34	823	855	802	748	782	925	glutamyl-tRNA synthetase 2, mitochondrial
PMVK	690	1073	826	1331	893	925	cell division cycle 27
XPC	768	740	909	793	959	925	phosphomevalonate kinase
LMLN	1173	831	937	947	1016	925	xeroderma pigmentosum, complementation group C
LOC100544577	628	898	792	1098	1095	925	lipase maturation factor 2
RANGAP1	975	989	1015	1204	967	925	protocadherin gamma-C3
ATRX	1159	797	1072	860	878	924	Ran GTPase activating protein 1
GTF3C3	1070	856	1022	1043	890	924	alpha thalassemia/mental retardation syndrome X-linked
LOC100538708	909	907	900	899	805	924	general transcription factor IIC, polypeptide 2, beta 110kDa
	1064	809	1013	824	787	923	cytochrome c oxidase subunit 4 isoform 1, mitochondrial

SEMA7A							
KLF12	924	998	893	983	947	923	semaphorin 7A, GPI membrane anchor (John Milton Hagen blood group)
MID1P1	816	833	901	979	824	923	Kruppel-like factor 11
LOC104913988	1059	955	936	660	1067	923	MID1 interacting protein 1
NR1D2	1050	799	991	802	879	923	serine/threonine-protein kinase 4
NUP210	908	1124	1024	942	1080	922	nuclear receptor subfamily 1, group D, member 2
ECT2	1218	957	1061	1005	778	922	nucleoporin 210kDa
	1055	763	1086	800	813	922	endothelial cell surface expressed chemotaxis and apoptosis regulator
ZHX1	1055	976	1039	1024	1015	922	zinc fingers and homeoboxes 1
DPH3	1054	949	927	750	1018	921	DPH2 homolog (S. cerevisiae)
SLC48A1	926	1181	894	1069	1046	921	solute carrier family 48 (heme transporter), member 1
TOMM34	1102	842	1057	807	1063	921	translocase of outer mitochondrial membrane 34
QPCT	1007	808	981	854	1088	920	glutaminyl-peptide cyclotransferase
SLC35D1							solute carrier family 35 (UDP-GlcA/UDP-GalNAc transporter), member D1
	966	1021	1008	993	1176	920	phosphatidylinositol-5-phosphate 4-kinase, type II, beta
PIP4K2B	1116	967	1051	951	1176	920	enoyl-CoA, hydratase/3-hydroxyacyl CoA dehydrogenase
EHMT1	994	823	1002	876	889	920	oligosaccharyltransferase 4 homolog (S. cerevisiae)
OST4	977	1254	1021	1008	959	920	cyclin J-like
CCNK	1048	826	973	830	909	919	BOC cell adhesion associated, oncogene regulated
BOC	965	930	914	797	877	919	Rho guanine nucleotide exchange factor (GEF) 11
ARHGEF11	1174	1072	1078	940	988	919	cholesteryl ester transfer protein, plasma
CFAP20	926	861	853	808	798	918	hydroxysteroid (11-beta) dehydrogenase 2
HSD17B10	840	953	872	911	914	918	TIMELESS interacting protein
TIPIN	1303	841	1074	768	951	917	ankyrin repeat and MYND domain containing 2
ANKMY2	974	840	987	861	935	916	cell division cycle 20B
CDC23	980	821	961	745	749	916	protein farnesyltransferase subunit beta-like
LOC100548350	957	889	925	928	916	916	ER membrane protein complex subunit 7
EMC8	888	858	850	816	822	916	DiGeorge syndrome critical region gene 2
DGCR6L	902	913	833	947	945	915	vaccinia related kinase 3
VRK3	807	901	858	882	852	914	dystrobrevin, beta
DTNBP1	809	859	859	853	836	914	trimethyllysine hydroxylase, epsilon
TMLHE	1125	831	1098	780	998	914	creatine kinase, mitochondrial 2 (sarcomeric)
CKS1B	1373	969	1159	843	868	914	ankyrin repeat domain 12
ANKRD12	860	991	953	1049	1077	913	uncharacterized LOC100544123
LOC100544124	911	917	935	904	836	913	acyl-CoA thioesterase 13
ACOT13	853	782	831	875	1025	913	laminin subunit alpha-2-like
LOC104909794	664	1143	735	1256	643	913	vacuolar protein sorting 41 homolog (S. cerevisiae)
VPS41	1131	889	1226	958	1246	913	Niemann-Pick disease, type C1
NPC1	771	800	833	939	706	913	ribosomal protein S6 kinase, 70kDa, polypeptide 2
RPS6KB2	811	999	802	789	749	913	Rap guanine nucleotide exchange factor (GEF) 2
RAPGEF2	858	824	921	998	821	912	ubiquitin specific peptidase 54
USP54	1051	818	1024	1020	912	912	protein LBH-like
LOC104911245	997	1027	1000	844	945	912	RIO kinase 1
RIOK1	1040	836	1000	799	801	912	mitochondrial ribosomal protein S28
MRPS28	1214	976	1250	829	969	911	RNA-binding protein 6-like
LOC100549028	1173	759	1007	710	1041	910	junctophilin-1-like
LOC104910379	902	874	874	1171	1203	910	lactamase, beta
LACTB2	959	829	904	830	891	909	cAMP responsive element binding protein 3-like 1
CREB3L2	1069	880	1099	935	1030	909	cystatin B (stefin B)
CSTF1	985	887	976	894	905	908	xyloside xylosyltransferase 1
XXYL1	1013	947	996	796	741	908	
LYSMD4							
	1211	971	1037	1078	1087	908	LysM, putative peptidoglycan-binding, domain containing 4
CASKIN2							
	1339	902	1162	845	936	908	calcium/calmodulin-dependent serine protein kinase (MAGUK family)
C17H12orf65	1015	911	965	814	975	908	chromosome 17 open reading frame, human C12orf49
MLEC	1206	886	1013	754	865	907	malectin
STRIP2	732	841	801	685	855	907	striatin interacting protein 2
LOC100542757	1256	800	1095	834	903	907	neuron-specific protein family member 2
NAA38	1017	878	953	834	909	907	N(alpha)-acetyltransferase 38, NatC auxiliary subunit
ZBTB10	1125	978	1076	857	969	907	zinc finger and BTB domain containing 10
TRMT10C	921	890	980	852	900	906	tRNA methyltransferase 10 homolog C (S. cerevisiae)
MGAT3							mannosyl (beta-1,4-)-glycoprotein beta-1,4-N-
	1305	1026	1059	1041	1030	906	acetylglucosaminyltransferase
COL17A1	915	955	954	810	779	906	collagen, type XVI, alpha 1
FAM103A1	1003	869	1044	857	960	906	family with sequence similarity 102, member B
MRPL50	861	813	940	784	676	905	mitochondrial ribosomal protein L50
RBM19	1343	770	1197	747	1039	904	RNA binding motif protein 19
TSR3	904	834	853	848	796	904	TSR3, 20S rRNA accumulation, homolog (S. cerevisiae)
ACBD3	991	860	935	761	851	904	acyl-CoA binding domain containing 3
NDE1	1059	758	1022	775	836	904	nudF neurodevelopment protein 1
C3H6orf52	1180	1010	1092	945	1024	904	chromosome 3 open reading frame, human C5orf49
ARPC1B	1141	852	975	840	1018	903	actin related protein 2/3 complex, subunit 1B, 41kDa
HELZ	971	842	919	963	962	903	helicase, POLQ-like
LOC104914866	579	621	754	942	702	903	growth hormone receptor-like
LOC100541624	1105	947	990	1022	917	903	cytochrome P450 2J6-like
TMEM43	1049	927	1083	899	842	903	transmembrane protein 43
PRPF3	1132	846	1022	903	943	903	pre-mRNA processing factor 3

TNK2	1078	900	1027	1051	891	903	tyrosine kinase, non-receptor, 2
LOC100550296	793	849	734	934	921	903	T-cell immunomodulatory protein
SMAP1	1072	886	1016	853	848	902	small ArfGAP 1
EXOC2	844	746	925	797	825	902	exocyst complex component 1
NEK1	937	869	951	889	788	902	NIMA-related kinase 1
CAV2	1118	1085	981	931	972	902	caveolin 1, caveolae protein, 22kDa
GSTA2	1154	813	1016	751	875	901	glutathione S-transferase alpha class A1.3
PEX19	842	1051	892	990	1006	901	peroxisomal biogenesis factor 19
LOC104913374	945	846	936	871	874	901	uncharacterized LOC104913374
LOC104910547	780	677	744	513	571	901	uncharacterized LOC104910547
ABR	1109	1049	1069	917	919	900	active BCR-related
LOC100551145	1107	950	1105	940	909	900	utrophin
RASA2	1141	943	1092	927	939	900	RAS p21 protein activator 2
GJC2	960	815	858	730	934	900	gap junction protein, gamma 1, 45kDa
SYNJ1	979	899	883	896	940	900	synaptotagmin 1
SECISBP2	766	709	884	787	672	899	SECIS binding protein 2
CALD1	947	807	960	885	1039	899	calcitonin receptor-like
RBM17	1111	914	996	814	838	899	RNA binding motif protein 17
PATL1							
	1010	941	996	884	919	899	protein associated with topoisomerase II homolog 1 (yeast)
ARFIP1	919	829	964	818	848	899	ADP-ribosylation factor interacting protein 1
GNB5							
	1337	1016	1154	1047	1041	899	guanine nucleotide binding protein (G protein), beta polypeptide 4
LOC100551000	849	900	952	756	1099	898	myotubularin-related protein 7-like
ADNP2	964	804	955	806	860	898	ADNP homeobox 2
IL17RD	977	789	1025	772	755	898	interleukin 17 receptor C
R3HDM2	693	848	689	801	792	898	R3H domain containing 2
FASTK	1362	922	1041	890	996	898	fatty acid synthase
PPIC	834	916	1035	731	630	898	peptidylprolyl isomerase C (cyclophilin C)
NADK2	955	864	937	787	702	898	NAD kinase 2, mitochondrial
ZFP91	1064	800	930	870	946	898	ZFP91 zinc finger protein
SYDE2	1022	1027	1054	981	925	897	synapse defective 1, Rho GTPase, homolog 2 (C. elegans)
SUDS3							
	886	806	859	795	820	897	suppressor of defective silencing 3 homolog (S. cerevisiae)
STOML2	940	729	966	657	766	897	stomatin (EPB72)-like 2
KDM2B	939	832	936	865	918	897	lysine (K)-specific demethylase 2A
EPB41L1	1187	926	1160	988	933	896	erythrocyte membrane protein band 4.1
ATF2	910	842	920	782	879	896	activating transcription factor 2
UBXN7	947	833	888	876	908	896	UBX domain protein 7
KAT6A	1051	939	1010	1047	944	896	K(lysine) acetyltransferase 2B
MIER1							
	930	932	984	879	866	896	mesoderm induction early response 1, transcriptional regulator
SAV1	1136	891	1059	783	938	896	salvador family WW domain containing protein 1
NF1	1035	831	905	1001	965	896	neurofibromin 1
FAM212B	993	1081	997	984	987	896	family with sequence similarity 210, member B
EGFL7	961	995	907	847	907	895	EGF-like-domain, multiple 6
NELFA	835	797	979	861	920	895	negative elongation factor complex member A
GLIPR2	1165	836	1042	861	970	895	GLI family zinc finger 3
LOC104912477							
	1000	994	952	880	1034	895	CMP-N-acetylneuraminate-beta-1,4-galactoside alpha-2,3-
DENND1A	930	874	927	839	830	893	sialyltransferase-like
HIGD2A	864	1011	944	871	1086	892	DEK proto-oncogene
STAB1	1012	950	910	972	1039	892	HIG1 hypoxia inducible domain family, member 1A
CBX1	1096	863	1017	861	825	892	stabilin 1
IGSF3	1169	1050	1035	1070	1218	891	carbonyl reductase 4
CLSTN3	831	778	774	754	793	891	immunoglobulin superfamily, member 21
PIM3	681	761	776	1003	806	890	claspin
PLA2G12A	1146	915	960	817	915	889	Pim-3 proto-oncogene, serine/threonine kinase
CD109							
	1007	1129	1093	778	774	888	phospholipase A2, group XIAA
UBR1	972	821	1032	952	857	888	CCZ1 vacuolar protein trafficking and biogenesis associated homolog (S. cerevisiae)
WDHD1	1062	785	955	793	767	887	ubiquitin protein ligase E3 component n-recognin 1
NUMB	903	828	842	833	783	887	WD repeat and HMG-box DNA binding protein 1
ZNF318	889	828	890	920	774	887	numb homolog (Drosophila)
SETD5	1044	916	1001	916	935	887	zinc finger protein 318
KIF13A	904	1016	924	1022	897	887	SET domain containing 5
LOC100542624	1128	915	954	829	870	887	kinesin family member 12
ADIPOR1	937	884	880	851	921	887	olfactomedin-4-like
HSDL1	1187	728	1223	674	1098	887	adiponectin receptor 1
C14H3orf18	945	774	973	824	861	887	hydroxysteroid (17-beta) dehydrogenase 7
ZBTB37	1106	953	992	1007	1010	886	chromosome 14 open reading frame, human C3orf14
TMEM159	1257	1012	1080	904	1064	886	zinc finger and BTB domain containing 37
SGCE	964	950	961	899	931	886	transmembrane protein 159
LETM1	863	725	829	831	852	886	sarcoglycan, epsilon
DTYMK	980	811	976	773	847	886	leptin receptor overlapping transcript-like 1
HGS	1206	908	1051	996	878	886	deltex 4, E3 ubiquitin ligase
PLBD2	911	1111	890	920	863	885	HGH1 homolog (S. cerevisiae)
MTMR14	1015	1127	908	935	857	885	phospholipase B domain containing 2
ENDOG	861	705	799	633	812	885	myotubularin related protein 14
							endonuclease domain containing 1

LOC104909837	785	877	819	870	843	884	DNA polymerase zeta catalytic subunit-like
PAK1IP1	1309	686	1189	850	1209	884	PAK1 interacting protein 1
USF1	1024	918	912	921	945	884	upstream transcription factor 1
THBS2	1014	1163	1658	666	629	883	thrombospondin 2
CCDC117	990	863	916	828	867	883	coiled-coil domain containing 113
PGPEP1L	1038	1080	1059	937	1031	883	pyroglutamyl-peptidase I-like
HSD17B12	1050	729	970	584	809	883	hydroxysteroid (17-beta) dehydrogenase 10
IFNGR1	874	824	924	996	846	883	interferon, gamma
CRELD2	1255	717	957	610	751	882	cysteine-rich with EGF-like domains 1
HMGXB4	1035	889	888	708	821	882	HMG box domain containing 3
LOC104910781	993	894	980	861	964	881	uncharacterized LOC104910781
ADI1	860	779	773	871	831	881	acireductone dioxygenase 1
FBXW7	885	788	851	695	699	881	F-box and WD repeat domain containing 5
CDC45	1196	796	1077	699	829	881	CDC42 small effector 2
AMMECR1L	949	911	894	814	789	880	AMMECR1-like
SLC25A32							
	910	794	782	853	840	880	solute carrier family 25 (mitochondrial folate carrier), member 32
TATDN3	897	820	880	821	854	880	TatD DNase domain containing 3
LOC100549824	965	768	922	707	815	879	MICOS complex subunit MIC60-like
HPS5	724	732	782	776	749	879	Hermansky-Pudlak syndrome 4
PIA2	868	842	907	832	762	879	praja ring finger 2, E3 ubiquitin protein ligase
SART3	1048	827	995	806	890	879	squamous cell carcinoma antigen recognized by T cells 3
LOC100543264	921	794	773	720	915	878	cholesterol side-chain cleavage enzyme, mitochondrial
ZDHHC6	929	826	902	875	931	878	zinc finger, DHHC-type containing 6
CORO1B	1199	803	1084	792	965	878	coenzyme Q9
TXLNG	885	851	828	881	944	878	taxilin gamma
LOC104909626	829	889	854	999	862	878	uncharacterized LOC104909626
ATP6V0A2	1117	772	1049	811	892	877	ATPase, H+ transporting, lysosomal V0 subunit a2
SETX	990	844	970	860	898	877	senataxin
KDM2A	895	852	892	886	952	876	lysine (K)-specific demethylase 1B
SEMA5A							sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain,
	926	1026	986	1028	762	876	(semaphorin) 5A
LOC100538974	861	704	830	627	738	876	uncharacterized LOC100538971
KANSL1L	848	858	911	866	852	876	KAT8 regulatory NSL complex subunit 1
ZZZ3	946	809	911	840	880	876	zinc finger, ZZ-type containing 3
ALMS1	1034	877	953	859	784	875	Alstrom syndrome 1
FUT11	1073	1050	990	986	943	875	fucosyltransferase 10 (alpha (1,3) fucosyltransferase)
SDF2L1	1017	722	1033	739	786	875	stromal cell-derived factor 2-like 1
AIDA	1184	855	1086	792	833	875	axin interactor, dorsalization associated
WEE1	1125	777	1052	695	787	875	WEE1 G2 checkpoint kinase
SEC11A	1129	836	1007	697	799	875	SEC11 homolog A (S. cerevisiae)
ZCRB1	947	895	949	826	915	875	zinc finger CCHC-type and RNA binding motif 1
KIAA0319	755	750	779	824	924	875	KIAA0232 ortholog
SEC11C	881	882	890	744	733	875	SEC11 homolog C (S. cerevisiae)
KIFAP3	904	895	919	850	856	874	kinesin family member 9
POLR2D	844	760	882	722	815	874	polymerase (RNA) II (DNA directed) polypeptide D
LOC104915377	607	871	732	829	650	874	uncharacterized LOC104915377
KIF16B	769	841	814	829	794	873	kinesin family member 15
MFS1D	714	899	816	961	766	873	major facilitator superfamily domain containing 1
LOC100550314	805	739	950	698	736	873	isochorismatase domain-containing protein 1
THAP4	902	928	888	943	898	873	THAP domain containing 4
FAHD1	661	681	610	649	888	873	fumarylacetoacetate hydrolase (fumarylacetoacetase)
KLHL15	997	797	974	804	890	873	kelch-like family member 14
LOC100541155	828	883	729	839	800	872	actin, alpha skeletal muscle B-like
LOC104912530	897	714	854	671	788	872	uncharacterized LOC104912530
XRCC6BP1	788	795	877	799	844	872	XRCC6 binding protein 1
DHODH	1152	928	951	692	822	872	desert hedgehog
PAM16							
	890	935	890	766	956	872	presequence translocase-associated motor 16 homolog (S. cerevisiae)
DHRS7	1092	1080	953	887	786	871	dehydrogenase/reductase (SDR family) member 3
FNDC3A	980	987	976	1012	1011	871	fibronectin type III domain containing 1
HDHD2	668	687	723	681	585	871	haloacid dehalogenase-like hydrolase domain containing 1
KDM4B	886	862	942	948	839	871	lysine (K)-specific demethylase 4A
TOR1A	1028	908	931	741	881	871	torsin family 1, member A (torsin A)
SZRD1	654	809	755	945	797	871	SUZ RNA binding domain containing 1
HPS1	898	902	843	786	694	870	hypoxanthine phosphoribosyltransferase 1
MTMR6	837	754	810	737	807	870	myotubularin related protein 6
BMF	544	560	796	944	770	870	Bcl2 modifying factor
CLK2	814	858	797	804	790	870	doublecortin-like kinase 1
LOC100550035	774	586	837	789	714	870	olfactory receptor 1052-like
RRP15	924	844	879	745	839	869	ribosomal RNA processing 15 homolog (S. cerevisiae)
HARS	1009	769	853	823	867	869	harbinger transposase derived 1
EIF2B1	989	807	892	757	816	869	eukaryotic translation initiation factor 2 alpha kinase 4
CDC16	983	854	950	767	812	869	cell division cycle 14B
CERS5	1009	824	914	767	827	868	ceramide synthase 3
LOC104910044	823	899	823	945	901	868	zinc finger protein 91-like
YIPF1	1079	866	930	807	916	868	Yip1 domain family, member 1
FAM65A	1166	884	1187	840	1205	867	family with sequence similarity 64, member A

GALNT7	753	616	700	974	843	867	polypeptide N-acetylgalactosaminyltransferase 6
LOC100549055	3404	772	2299	527	1494	867	janus kinase and microtubule-interacting protein 3-like
TADA3	988	992	973	931	831	867	transcriptional adaptor 3
ANP32A							
CARS2	999	881	943	872	888	867	acidic (leucine-rich) nuclear phosphoprotein 32 family, member A
TRMT2A	899	798	953	711	687	867	cysteinyl-tRNA synthetase
LOC104909236	978	789	849	807	854	867	tRNA methyltransferase 2 homolog A (S. cerevisiae)
ILF3	731	937	850	932	795	866	lysine-specific demethylase 6A-like
NCAPG	1097	756	1063	877	842	865	interleukin enhancer binding factor 2
KBTBD8	1184	782	1049	814	756	865	non-SMC condensin I complex, subunit G
LOC104909233	914	768	867	945	900	865	kelch repeat and BTB (POZ) domain containing 4
MYLIP	798	822	879	815	883	865	ATP-binding cassette sub-family D member 2-like
LOC104913694	822	881	819	845	973	864	myosin regulatory light chain interacting protein
RBM8A	989	866	960	772	928	864	pleckstrin homology-like domain family B member 2
TNS1	1061	810	919	719	818	864	RNA binding motif protein 8A
EML4	990	1126	953	1021	947	864	tensin 1
EGFL6	855	722	869	710	791	864	echinoderm microtubule associated protein like 1
TMF1	744	723	794	793	530	864	epidermal growth factor
TNFAIP8L3	1015	924	1017	931	949	863	TATA element modulatory factor 1
RCOR3	797	662	896	645	834	863	tumor necrosis factor, alpha-induced protein 8-like 3
TMEM65	1074	839	998	826	958	863	REST corepressor 3
CDS2	738	698	772	728	672	863	transmembrane protein 65
TBC1D9	1073	863	986	777	897	863	CDP-diacylglycerol synthase (phosphatidate cytidylyltransferase) 1
THOC1	912	671	877	692	813	863	TBC1 domain family, member 9 (with GRAM domain)
LOC100541207	994	792	876	722	732	862	THO complex 1
PIGT	1006	1355	1009	1118	882	862	heparan sulfate glucosamine 3-O-sulfotransferase 1-like
LOC104911764	911	763	834	692	718	862	phosphatidylinositol glycan anchor biosynthesis, class T
RCBTB2	774	651	797	744	838	862	unconventional myosin-X-like
ST5	824	806	843	875	845	862	regulator of chromosome condensation (RCC1) and BTB (POZ) domain
PDE8A	910	888	934	788	833	862	containing protein 2
LPGAT1	686	920	744	777	726	861	suppression of tumorigenicity 5
ZFAND1	933	836	894	731	781	861	phosphodiesterase 8A
TSEN54	993	691	1034	782	911	861	lysophosphatidylglycerol acyltransferase 1
ALS2	933	809	886	841	799	861	zinc finger, AN1-type domain 1
TTK	893	852	835	803	844	861	TSEN54 tRNA splicing endonuclease subunit
EIF2B3	1021	757	1034	778	781	860	amyotrophic lateral sclerosis 2 (juvenile)
LOC104909199	974	758	896	785	858	859	TTK protein kinase
ATF7IP	819	751	730	904	878	859	eukaryotic translation initiation factor 2B, subunit 2 beta, 39kDa
BOLA3	995	903	975	921	921	859	paired box protein Pax-7-like
GTPBP2	810	1008	765	798	860	859	activating transcription factor 7 interacting protein
SMCHD1	649	988	809	964	805	859	bolA family member 3
AAAS	901	766	827	858	800	859	GTP binding protein 1
LOC100544066	960	846	1015	709	850	858	structural maintenance of chromosomes flexible hinge domain
PRKAR2A	1005	909	964	821	850	858	containing 1
TYMS	1001	867	909	930	872	858	achalasia, adrenocortical insufficiency, alacrimia
POLR3H	1031	775	1033	604	620	858	uncharacterized LOC100544062
CACTIN	960	843	883	726	930	858	protein kinase, cAMP-dependent, regulatory, type II, alpha
SOX8	1022	904	988	911	897	857	thymidylate synthetase
LOC104913727	881	834	877	817	799	857	polymerase (RNA) III (DNA directed) polypeptide H (22.9kD)
SEL1L3	1450	852	1674	799	1109	857	calcium channel, voltage-dependent, gamma subunit 5
ZDHC20	870	872	854	843	848	856	SRY (sex determining region Y)-box 8
ZNF423	862	714	923	766	751	856	myosin-8-like
SWI5	1084	878	1070	851	866	856	sel-1 suppressor of lin-12-like 3 (C. elegans)
LIG1	968	811	799	663	780	856	zinc finger, DHHC-type containing 20
WFDC1	1129	768	1015	688	773	856	zinc finger protein 423
VPS13A	1066	973	1100	918	1115	856	SWI5 recombination repair homolog (yeast)
ACE	791	750	870	945	678	855	leukemia inhibitory factor receptor alpha
PSMD10	902	984	911	1140	722	855	WAP four-disulfide core domain 1
LOC100543226	907	833	902	804	783	855	vacuolar protein sorting 13 homolog A (S. cerevisiae)
MYADML2	1005	844	891	804	838	855	angiotensin I converting enzyme
VIPAS39	781	1094	862	755	1025	855	proteasome (prosome, macropain) 26S subunit, non-ATPase, 10
LOC104914794	1032	816	914	706	838	855	probable ATP-dependent DNA helicase HFM1
CKLF	797	916	883	1055	800	855	myeloid-associated differentiation marker-like 2
ST3GAL2	1062	828	1015	766	894	854	VPS33B interacting protein, apical-basolateral polarity regulator, spe-39
MYO10	1054	813	961	801	1107	854	homolog
MAP3K14	911	708	1027	653	809	853	RUN and SH3 domain containing 2
MTMR12	1069	923	976	862	1049	853	creatine kinase, brain
NMT2	793	831	867	810	686	853	ST3 beta-galactoside alpha-2,3-sialyltransferase 2
POGLUT1	855	858	920	956	892	853	myosin X
BOD1L1	990	802	864	700	810	853	mitogen-activated protein kinase kinase kinase 14
SMURF2	951	830	906	1010	824	853	myotubularin related protein 12
	857	932	887	893	869	852	N-myristoyltransferase 2
							protein O-glucosyltransferase 1
							bioorientation of chromosomes in cell division 1-like 1
							SMAD specific E3 ubiquitin protein ligase 2

LOC104916976	1161	950	1069	935	1082	852	homeobox protein six1-like
LOC100545752	958	1139	994	1117	1157	852	cytochrome c oxidase subunit 5A, mitochondrial
MAN2C1	834	748	831	761	810	851	mannosidase, alpha, class 2C, member 1
ECSCR	995	809	903	730	937	851	extracellular matrix protein 2, female organ and adipocyte specific
ARFGEF2	911	739	921	755	755	851	ADP-ribosylation factor guanine nucleotide-exchange factor 2 (brefeldin A-inhibited)
IER3IP1	828	869	862	752	756	850	iduronidase, alpha-L-
DENND4A	755	917	799	1004	932	850	DENN/MADD domain containing 3
ZPR1	980	852	897	752	820	850	ZPR1 zinc finger
CWC22	935	793	885	806	727	850	CWC15 spliceosome-associated protein
TFEB	787	858	862	1040	939	850	transcription factor EB
GTF2H1	1074	815	967	842	809	850	general transcription factor IIF, polypeptide 2, 30kDa
NAF1	985	737	868	783	746	850	nuclear assembly factor 1 ribonucleoprotein
LOC100551117	785	863	826	803	847	849	ankyrin repeat domain-containing protein 13D-like
XRN2	965	785	864	894	789	849	5'-3' exoribonuclease 2
ARMC6	991	786	1013	836	1100	849	armadillo repeat containing 6
DPT	916	858	973	967	700	848	dipeptidyl-peptidase 9
REXO4	905	706	814	730	749	848	REX4, RNA exonuclease 4 homolog (S. cerevisiae)
PPA2	783	843	884	781	763	847	pyrophosphatase (inorganic) 2
NOL8	1072	764	937	761	796	847	nucleolar protein 8
MRPL44	890	766	850	780	778	847	mitochondrial ribosomal protein L44
LOC100546891	951	794	850	903	859	847	putative zinc finger protein 724
BBOX1	1076	970	1010	788	753	847	butyrobetaine (gamma), 2-oxoglutarate dioxygenase (gamma-butyrobetaine hydroxylase) 1
RFNG	997	915	951	857	868	846	RFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase
LMBRD1	946	812	977	828	830	846	limb development membrane protein 1-like
LOC104914997	780	723	842	664	616	845	uncharacterized LOC104914997
LOC104913775	791	827	752	749	710	845	uncharacterized LOC104913775
PHPT1	855	866	834	753	776	845	phosphohistidine phosphatase 1
KNSTRN	1075	813	1055	756	753	845	lysine-rich nucleolar protein 1
OBSL1	707	553	625	587	759	845	obscurin-like 1
RBM33	888	746	863	884	896	844	RNA binding motif protein 33
PPP2R3B	768	804	992	837	656	844	protein phosphatase 2, regulatory subunit B'', beta
TP53BP2	1026	887	1008	829	823	844	tumor protein p53 binding protein 2
LOC100540086	877	710	829	750	814	844	forkhead box protein C2-like
ENG	998	796	1030	816	1069	844	endonuclease V
PMM2	912	759	885	688	698	844	phosphomannomutase 2
TRAPPC6B	752	644	671	586	621	844	trafficking protein particle complex 6B
MTMR3	907	803	866	965	854	843	myotubularin related protein 3
TPK1	837	657	868	664	875	843	thiamin pyrophosphokinase 1
YPEL2	652	1003	774	1011	794	843	yippee-like 2 (Drosophila)
LOC100546546	749	753	735	866	769	843	aldose reductase-related protein 2-like
C2H6orf211	956	664	939	739	855	843	chromosome 2 open reading frame, human C6orf203
NR4A1	585	1038	629	1016	1057	843	nuclear receptor subfamily 4, group A, member 1
PTPRA	934	786	898	684	870	843	protein tyrosine phosphatase, receptor type, A
TMCC1	699	678	749	810	834	842	transmembrane and coiled-coil domain family 1
PSPH	687	680	826	872	976	842	phosphoserine phosphatase
BRPF3	973	849	1018	864	903	842	bromodomain and PHD finger containing, 1
KIAA0100	1009	910	903	857	954	842	KIAA0040 ortholog
KIAA0196	859	739	887	735	723	841	KIAA0195 ortholog
LOC104912512	687	888	922	752	754	840	GPI-anchor transamidase-like
DBNL	952	894	902	773	797	840	dysbindin (dystrobrein binding protein 1) domain containing 2
ATG4C	853	786	815	785	816	840	autophagy related 4C, cysteine peptidase
BNIP2	1037	822	992	783	877	840	BCL2/adenovirus E1B 19kDa interacting protein 2
TAF1D	1027	842	869	704	750	840	TATA box binding protein (TBP)-associated factor, RNA polymerase I, D, 41kDa
IGF2R	877	852	920	910	796	839	insulin-like growth factor 2 mRNA binding protein 3
FDX1	701	633	725	644	787	839	farnesyl diphosphate synthase
SPG20	1121	779	1138	780	894	838	spastic paraplegia 20 (Troyer syndrome)
MTIF2	872	743	828	751	814	838	mitochondrial translational initiation factor 2
LOC104911699	779	1040	770	1132	683	838	uncharacterized LOC104911699
LOC104915776	907	676	811	653	700	838	mitochondrial inner membrane protein OXA1L
PRKAG2	927	758	836	753	792	838	protein kinase, AMP-activated, gamma 2 non-catalytic subunit
TAPT1	973	1041	993	925	879	838	transmembrane anterior posterior transformation 1
LOC100539376	840	803	880	834	775	838	pentafunctional AROM polypeptide-like
PLCL1	1599	914	1214	973	889	837	phospholipase C-like 1
MYL3	390	1338	391	966	175	837	myosin, light chain 3, alkali; ventricular, skeletal, slow
TMEM50B	1021	820	936	782	849	837	transmembrane protein 50B
CNOT11	982	826	949	844	811	837	CCR4-NOT transcription complex, subunit 10
LOC100551412	821	895	852	788	879	837	cytochrome b ascorbate-dependent protein 3
RAB8A	951	769	865	693	762	836	RAB8A, member RAS oncogene family
HAT1	1015	711	922	740	742	836	hyaluronan synthase 3
MYOM3	1081	985	1072	930	844	836	myomesin 3
EIF4ENIF1	909	815	869	722	797	836	eukaryotic translation initiation factor 4E binding protein 3
PRRC2B	1014	796	916	890	930	835	proline-rich coiled-coil 2B

PRPS2	958	915	942	888	738	835	phosphoribosyl pyrophosphate synthetase 2
PBLD	660	687	628	695	653	835	phenazine biosynthesis-like protein domain containing
ARHGEF12	1060	844	980	886	886	835	Rho guanine nucleotide exchange factor (GEF) 12
TMEM245	787	731	927	846	751	834	transmembrane protein 245
ARL2BP	957	680	933	733	1066	834	ADP-ribosylation factor-like 2 binding protein
VAV2	1087	854	898	756	871	834	vav 2 guanine nucleotide exchange factor
LOC100542970	810	947	942	679	768	834	alpha-2-macroglobulin-like protein 1
CNOT8	1006	831	932	786	841	834	CCR4-NOT transcription complex, subunit 7
SCFD1	1033	813	922	741	753	834	sec1 family domain containing 1
CYTH1	778	758	713	667	760	834	cysteinyl leukotriene receptor 2
LOC104914090	475	872	615	1281	756	833	neurofilament heavy polypeptide-like
LOC104915716	849	749	811	717	835	833	uncharacterized LOC104915716
INO80	887	797	863	842	808	832	INTS3 and NABP interacting protein
IYD	1962	1070	1316	1392	2183	832	IWS1 homolog (S. cerevisiae)
EIF2AK1	1008	831	931	796	912	832	eukaryotic translation initiation factor 2A, 65kDa
FAM91A1	895	758	848	844	756	832	family with sequence similarity 8, member A1
MGME1	1073	791	975	736	790	832	mitochondrial genome maintenance exonuclease 1
MYEF2	971	707	887	758	784	832	myelin expression factor 2
GALK2	1085	787	1033	750	809	832	galactokinase 1
LOC104915670	880	654	889	835	902	832	tubulin alpha-4A chain-like
TRAPPC2	874	803	896	785	791	832	trafficking protein particle complex 2
IFFO1	913	751	873	852	758	831	immediate early response 5
FUBP3	905	801	904	872	780	831	far upstream element (FUSE) binding protein 1
RNASEH2B	964	825	932	866	797	831	ribonuclease H2, subunit B
TOE1	977	811	917	728	840	831	target of EGR1, member 1 (nuclear)
SUV39H2	924	825	895	749	863	831	suppressor of variegation 3-9 homolog 2 (Drosophila)
LOC100547897	652	829	687	1038	793	830	aspartate--tRNA ligase, mitochondrial
CBL	996	729	907	705	809	830	core-binding factor, beta subunit
RHOQ	917	800	846	1012	1023	830	ras homolog family member Q
WIZ	925	837	900	912	921	830	widely interspaced zinc finger motifs
RAB33B	979	816	915	738	939	829	RAB33B, member RAS oncogene family
LOC104912258	848	809	926	824	899	828	rho GTPase-activating protein 29-like
ARPC5L	825	763	780	705	786	828	actin related protein 2/3 complex, subunit 5-like
LOC104914333	1172	853	990	954	904	827	uncharacterized LOC104914333
CCDC101	858	814	827	698	736	827	cysteine conjugate-beta lyase 2
CIAO1	807	773	885	747	801	827	churchill domain containing 1
LOC104909257	905	832	791	744	808	827	glutamate receptor ionotropic, NMDA 3B-like
PHIP	1012	815	993	919	879	827	pleckstrin homology domain interacting protein
GNPTG							
	915	792	853	741	830	827	N-acetylglucosamine-1-phosphate transferase, alpha and beta subunits
PRMT3	994	677	893	688	797	827	protein arginine methyltransferase 3
EPM2A	646	642	743	661	830	827	epoxide hydrolase 4
SLC25A51	789	848	727	675	689	826	solute carrier family 25, member 51
LOC100542122	868	744	818	751	706	826	latent-transforming growth factor beta-binding protein 1
LOC104911749	836	689	825	752	809	826	obg-like ATPase 1
PHLPP2	862	845	806	758	831	825	PH domain and leucine rich repeat protein phosphatase 2
SEMA6A							sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6A
	579	638	695	853	631	825	protein C19orf12 homolog
LOC100538852	676	760	626	679	670	825	uncharacterized LOC100549224
LOC100549224	926	655	904	769	822	825	intracellular transport 88
IGBP1	847	895	820	948	821	825	diacylglycerol kinase, delta 130kDa
DGKE	1049	779	964	807	918	825	rhomboid 5 homolog 2 (Drosophila)
RHBDF2	996	875	906	838	873	825	penta-EF-hand domain containing 1
PEF1	726	755	771	711	738	824	sprouty-related, EVH1 domain containing 1
SPRED1	1032	779	953	751	817	824	
UTP6							
	982	755	878	697	724	824	UTP6, small subunit (SSU) processome component, homolog (yeast)
CHKA	1382	810	1096	747	876	823	chitinase domain containing 1
CRNKL1	934	730	874	721	761	823	collapsin response mediator protein 1
CASC3	1143	825	993	934	976	823	cancer susceptibility candidate 1
IKZF5	824	728	883	784	786	823	IKAROS family zinc finger 4 (Eos)
NGAMT2	807	774	847	815	858	823	N-6 adenine-specific DNA methyltransferase 2 (putative)
IGF2BP2	1150	955	988	723	756	823	insulin-like growth factor 2 mRNA binding protein 1
TMOD3	893	834	917	860	752	823	tropomodulin 3 (ubiquitous)
LOC100546350	872	864	877	749	816	823	leucine-rich repeat-containing protein 9-like
BRWD3	849	799	828	935	886	822	bromodomain and WD repeat domain containing 1
PRUNE	904	862	867	811	1040	822	prune exopolyphosphatase
ROMO1	804	1054	828	833	888	821	reactive oxygen species modulator 1
NFRKB	813	780	845	800	789	821	nuclear factor related to kappaB binding protein
DDR2							dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit (non-catalytic)
	895	712	964	505	675	821	zinc finger, FYVE domain containing 19
ZFYVE19	710	686	729	744	686	821	histone-lysine N-methyltransferase NSD2
LOC100543305	1124	638	1011	742	794	821	F-box protein 21
FBXO22	969	743	929	811	832	821	ATP-binding cassette, sub-family A (ABC1), member 5
ABCA5	783	883	823	1004	900	820	centrosomal protein 170kDa
CEP170B	662	653	744	743	703	820	methyl-CpG binding domain protein 3
MBD3	1032	822	956	705	761	820	ankyrin repeat and SOCS box containing 1
ASB1	763	734	780	696	996	819	annexin A7
ANXA7	497	521	598	618	553	819	

RMDN3	963	843	863	718	838	819	regulator of microtubule dynamics 3
LOC100538371	879	656	866	637	786	819	octopamine receptor-like
WDR70	634	662	772	709	574	818	WD repeat domain 70
RUSC1	839	885	795	897	745	818	RUN and SH3 domain containing 1
VPS13B	829	763	831	802	813	818	vacuolar protein sorting 13 homolog B (yeast)
FKBP15	895	827	828	780	836	817	FK506 binding protein 14, 22 kDa
BTBD6	741	937	722	713	803	817	BTB (POZ) domain containing 3
ZER1	681	809	842	935	776	816	zyg-11 related, cell cycle regulator
ZADH2	857	785	849	814	755	816	zinc binding alcohol dehydrogenase domain containing 2
ANKRD44	872	848	899	901	799	816	ankyrin repeat domain 44
TMEM164	961	945	907	755	691	816	transmembrane protein 164
WDR20	804	789	795	849	845	816	WD repeat domain 20
GDPD1	744	831	800	978	929	816	glial cell derived neurotrophic factor
LOC104913015	868	780	882	792	838	815	chromodomain-helicase-DNA-binding protein 9-like
DHFR	1002	685	1017	596	631	815	dihydrodiol dehydrogenase (dimeric)
AURKA	1073	648	1022	687	756	815	aurora kinase A
INPP4A	757	783	766	823	785	815	inositol polyphosphate-1-phosphatase
ACAA1	1019	837	956	803	877	815	acetyl-CoA acyltransferase 1
ATP6V1H							
	785	696	804	638	711	814	ATPase, H+ transporting, lysosomal 50/57kDa, V1 subunit H
CDR2	998	797	932	668	795	814	cysteine-rich, DPF motif domain containing 1
PPM1G	1087	851	984	829	883	814	protein phosphatase, Mg2+/Mn2+ dependent, 1G
SLC44A1	768	910	862	1139	761	814	solute carrier family 44 (choline transporter), member 1
COG7	793	692	780	733	728	814	component of oligomeric golgi complex 6
LOC100544335	887	895	820	924	903	814	general transcription factor IIF subunit 2-like
AKAP8	958	958	1011	866	886	814	A kinase (PRKA) anchor protein 8
TMEM204	945	781	880	753	846	814	transmembrane protein 204
UBTD2	958	942	913	884	913	814	ubiquitin domain containing 2
EFR3A	833	780	835	754	753	813	ephrin-B2
CDH11	833	648	892	652	809	813	cadherin 1, type 1, E-cadherin (epithelial)
CSK	944	725	831	733	811	813	chondroitin sulfate N-acetylglucosaminyltransferase 2
ALPK2	560	490	516	691	724	813	alpha-kinase 2
CPSF3L	837	692	893	710	751	813	cleavage and polyadenylation specific factor 3, 73kDa
LOC100546924	937	754	833	744	835	813	selenoprotein Pb-like
EZH1	959	848	862	765	822	813	EYA transcriptional coactivator and phosphatase 3
LOC100546086	1081	823	1132	831	1092	812	receptor tyrosine-protein kinase erbB-3-like
TTC4	840	790	775	768	810	812	tetratricopeptide repeat domain 4
LOC104913931	820	715	843	728	834	812	uncharacterized LOC104913931
BTRC	927	806	862	868	884	812	Bruton agammaglobulinemia tyrosine kinase
CMTR1	928	767	840	742	796	812	CKLF-like MARVEL transmembrane domain containing 8
SREK1	815	746	806	799	717	812	splicing regulatory glutamine/lysine-rich protein 1
KNTC1	1155	730	994	699	731	812	kinetochore-localized astrin/SPAG5 binding protein
NPTN	921	679	831	697	785	812	neuroplastin
MSL2	832	756	806	746	729	812	male-specific lethal 2 homolog (Drosophila)
PPP2R3C	827	791	819	734	756	811	protein phosphatase 2, regulatory subunit B'', gamma
INTS4	920	719	807	716	792	811	integrator complex subunit 2
DNAJC9	1018	866	844	724	746	811	DnaJ (Hsp40) homolog, subfamily C, member 8
CDK19	936	1081	1009	1165	889	810	cyclin-dependent kinase 18
SS18L2							
	819	982	817	937	793	810	synovial sarcoma translocation gene on chromosome 18-like 2
GSTK1	839	662	851	700	884	810	glutathione S-transferase 3
LOC100547348	706	744	765	771	653	810	proton-coupled amino acid transporter 1
FMOD	511	1605	1944	562	432	809	flavin containing monooxygenase 4
KLHL2	982	669	944	653	771	808	kelch-like family member 18
LOC104915191	782	753	870	731	680	808	chromodomain-helicase-DNA-binding protein 1-like
MTG1	808	852	797	726	776	808	mitochondrial ribosome-associated GTPase 1
GRHPR	470	722	587	657	510	808	grainyhead-like 3 (Drosophila)
LOC104914456	950	777	799	992	889	807	uncharacterized LOC104914456
DOCK11	857	746	798	789	711	807	double C2-like domains, beta
PLA2G7							phospholipase A2, group VII (platelet-activating factor acetylhydrolase, plasma)
	1046	783	990	812	965	807	ELOVL fatty acid elongase 5
ELOVL6	1028	442	995	503	764	807	mediator complex subunit 23
MED23	823	684	810	748	741	806	angiopoietin-related protein 1-like
LOC100546578	560	623	711	820	662	806	actin-like 6A
ACTL6A	1027	747	952	702	699	805	peroxisomal biogenesis factor 13
PEX13	871	818	856	858	815	805	polymyosin (RNA) I polypeptide D, 16kDa
POLR1D	742	688	827	707	790	805	TBC1 domain family, member 10A
TBC1D10A	933	797	835	723	779	805	transmembrane and coiled-coil domains 6
TMCO6	894	849	855	707	748	805	exosome component 8
EXOSC9	940	724	854	710	736	805	ring finger protein 214
RNF214	922	778	855	794	791	804	tribbles pseudokinase 2
TRIB2	952	929	986	757	748	804	tetrapoietin (DNA) III beta
TOP3B	830	747	825	718	724	804	phosphodiesterase 5A, cGMP-specific
PDE5A	1001	793	1009	845	841	804	OTU deubiquitinase 7A
OTUD7A	501	527	432	565	441	804	ring finger protein 168, E3 ubiquitin protein ligase
RNF168	983	856	904	737	870	803	chromosome 11 open reading frame, human C18orf32
C11H21orf2	956	821	849	824	873	803	bromodomain adjacent to zinc finger domain, 1B
BAZ1B	1082	793	913	805	786	803	transmembrane protein 185A
TMEM185A	930	822	798	738	895	803	

CRTAC1	1043	931	823	815	735	803	carnitine O-octanoyltransferase
BRD1	795	752	847	891	771	802	BRCA1/BRCA2-containing complex, subunit 3
DAPP1	572	874	755	826	659	802	death-associated protein kinase 3
IMPA1	690	574	660	612	682	802	IMP4, U3 small nucleolar ribonucleoprotein
DCLRE1A	832	600	819	611	775	802	doublecortin-like kinase 3
LOC100543349	850	749	888	784	827	802	NAD-dependent protein deacetylase sirtuin-2-like
VPS37A	925	719	860	676	943	801	vacuolar protein sorting 37 homolog A (S. cerevisiae)
ZWILCH	1007	691	913	606	728	801	zwilch kinetochore protein
PODXL	957	925	906	832	793	801	podocalyxin-like
DERL1	807	757	805	803	802	801	deoxyribose-phosphate aldolase (putative)
PIGF	881	824	842	971	1011	801	phosphatidylinositol glycan anchor biosynthesis, class F
KIAA1551	933	834	864	792	835	801	KIAA1549-like ortholog
NCAPD3	1119	750	1059	725	782	800	non-SMC condensin II complex, subunit D3
TSPAN14	886	785	897	768	868	800	tetraspanin 14
ACSL1	654	1085	603	962	602	800	acyl-CoA synthetase long-chain family member 1
LOC104915722							
	898	883	811	782	806	800	chromosome unknown open reading frame, human C19orf43
OCRL	806	760	783	795	794	800	oculocerebrorenal syndrome of Lowe
RABGEF1	859	721	826	700	802	799	RAB guanine nucleotide exchange factor (GEF) 1
GMPPA	967	786	856	744	813	799	geminin, DNA replication inhibitor
MAF1	745	1099	709	1075	922	799	MAF1 homolog (S. cerevisiae)
COMTD1	885	728	834	739	849	799	catechol-O-methyltransferase
IMPAD1	1027	782	907	744	815	799	impact RWD domain protein
TRMU							
	800	652	822	636	701	798	tRNA 5-methylaminomethyl-2-thiouridylate methyltransferase
PRICKLE1	778	583	844	666	733	798	prickle homolog 1 (Drosophila)
FAM175B	858	732	740	786	794	798	family with sequence similarity 175, member A
KDELR3							KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention
	899	709	852	551	713	798	receptor 2
DGKZ	945	783	852	791	890	798	diacylglycerol kinase, theta 110kDa
TUBG1	1124	735	971	607	824	798	tubulin, gamma 1
PTPN12	945	799	872	719	790	798	protein tyrosine phosphatase, non-receptor type 12
LOC100549969	746	798	732	866	745	798	transmembrane protease serine 7-like
SEC23B	1031	756	872	671	826	797	Sec23 homolog B (S. cerevisiae)
OTUD1	1025	1255	969	1090	613	797	OTU deubiquitinase 1
CPT1A	1013	1795	1120	1520	884	797	cleavage and polyadenylation specific factor 7, 59kDa
CRCP	731	706	790	712	678	796	cereblon
NRBP2	822	924	791	829	800	795	nuclear receptor binding protein 2
HMCN1	771	883	874	988	887	795	5-hydroxymethylcytosine (hmC) binding, ES cell-specific
UBE2M	838	690	819	734	891	795	ubiquitin-conjugating enzyme E2M
LDLRAP1							
	785	696	771	658	651	795	low density lipoprotein receptor class A domain containing 4
CD276	991	607	906	615	842	795	CD274 molecule
MRRF	827	733	852	736	748	795	mitochondrial ribosome recycling factor
NDUFAF1							
	777	724	796	769	750	795	NADH dehydrogenase (ubiquinone) complex I, assembly factor 1
FAM114A1	863	777	1001	702	793	795	family with sequence similarity 110, member D
SLC45A1	802	725	833	710	762	794	solute carrier family 45, member 1
SPDL1	894	664	849	644	710	794	spindle apparatus coiled-coil protein 1
RMND5A							
	772	769	725	783	757	794	required for meiotic nuclear division 5 homolog A (S. cerevisiae)
CZH5orf42	834	666	900	690	617	794	chromosome Z open reading frame, human C5orf34
IQGAP2	934	751	837	751	729	793	IQ motif containing GTPase activating protein 1
NDEL1	766	800	821	839	836	793	nudE neurodevelopment protein 1-like 1
TMEM242	757	733	795	679	736	793	transmembrane protein 242
PSD3	1080	833	1069	799	792	793	pleckstrin and Sec7 domain containing 3
DUPD1	920	993	948	1380	1541	793	dual oxidase maturation factor 2
LOC104914521							
	862	749	860	617	746	792	ubiquinol-cytochrome-c reductase complex assembly factor 2
PODN	832	1047	978	1346	1361	791	podocan
RAB23	989	749	935	669	757	791	RAB23, member RAS oncogene family
SNX11	751	656	755	702	818	791	sorting nexin 11
C1HXorf23	1027	800	980	988	779	791	chromosome 1 open reading frame, human CXorf22
TBP	913	752	871	694	786	791	TATA box binding protein
RNF26	1002	745	941	691	852	791	ring finger protein 26
MMRN2	1052	849	1021	902	1019	791	multimerin 2
TAF15							TAF15 RNA polymerase II, TATA box binding protein (TBP)-associated
	962	749	886	679	708	790	factor, 68kDa
ASCC1	831	877	854	783	716	790	activating signal cointegrator 1 complex subunit 1
FAM195A	872	720	786	799	748	790	family with sequence similarity 193, member B
RBM7	743	790	761	752	652	790	RNA binding motif protein 7
KATNB1L1	934	728	899	673	823	789	katanin p80 (WD repeat containing) subunit B 1
CPQ	606	858	671	701	641	789	calcineurin-like phosphoesterase domain containing 1
TMEM123	991	677	901	680	739	789	transmembrane protein 123
HSPBP1	958	786	987	698	846	789	HSPB (heat shock 27kDa) associated protein 1
GDAP2	866	693	832	709	836	789	ganglioside induced differentiation associated protein 1
TRUB2	813	727	765	684	786	788	TruB pseudouridine (psi) synthase family member 2
LOC104917466	832	800	875	735	758	788	MYC binding protein 2, E3 ubiquitin protein ligase
FAM98B	861	663	783	722	719	788	family with sequence similarity 98, member A

RNF14	811	774	832	787	827	788	ring finger protein 14
EMP1	1033	916	1007	603	1006	788	echinoderm microtubule associated protein like 6
LOC104917501							leucine-rich repeat and calponin homology domain-containing protein 1-like
	622	763	708	799	706	787	
AQR	947	735	953	833	832	787	aquarius intron-binding spliceosomal factor
VP553	860	736	818	741	748	787	vacuolar protein sorting 53 homolog (S. cerevisiae)
FAM20B	838	792	827	742	806	786	family with sequence similarity 20, member A
TSNAX	891	729	927	693	841	786	translin-associated factor X
E4F1	834	781	756	713	693	785	E2F transcription factor 8
ARL5A	847	668	839	716	747	785	ADP-ribosylation factor-like 5A
C28H6orf89	847	773	813	816	824	784	chromosome 28 open reading frame, human C6orf132
CA8	676	676	845	802	791	784	carbonic anhydrase VII
RSBN1L	771	780	811	821	804	784	round spermatid basic protein 1-like
CCM2	911	784	837	714	776	784	chemokine (C-C motif) ligand 5
ITPR3	1318	931	960	758	808	784	inositol 1,4,5-trisphosphate receptor, type 2
MTG2	868	665	841	599	836	784	mitochondrial ribosome-associated GTPase 2
PRPF18	644	728	764	762	774	783	pre-mRNA processing factor 18
TXNL4A	836	844	861	757	711	783	thioredoxin-like 4A
ETAA1	1039	710	943	744	763	783	extended synaptotagmin-like protein 3
ATP6V1C1	723	721	819	739	704	783	ATPase, H+ transporting, lysosomal 42kDa, V1 subunit C1
MAP1S	1078	867	974	903	803	782	microtubule-associated protein 1S
DAB2	855	627	819	719	691	782	Dab, reelin signal transducer, homolog 1 (Drosophila)
RBBP5	935	759	871	781	787	782	retinoblastoma binding protein 5
TMEM30A	883	721	805	777	750	782	transmembrane protein 30A
LOC104914320	1226	698	1018	742	830	782	histone-binding protein RBBP4-like
PCMTD1							protein-L-isoaspartate (D-aspartate) O-methyltransferase domain containing 1
	365	708	703	1285	596	782	
RNF146	697	784	772	766	770	782	ring finger protein 146
NDUFAF3							
	728	960	687	666	783	782	NADH dehydrogenase (ubiquinone) complex I, assembly factor 3
LMBRD2	831	714	822	760	714	782	LMBR1 domain containing 1
DAGLB	720	757	745	782	754	781	diacylglycerol lipase, alpha
TTL9	846	980	869	837	909	781	tubulin tyrosine ligase-like family, member 9
LOC100551187	863	597	896	607	609	781	WD repeat-containing protein 36-like
LOC100538558	814	866	854	883	950	781	zinc finger SWIM domain-containing protein 6
NDUFAF2							
	768	616	797	524	569	781	NADH dehydrogenase (ubiquinone) complex I, assembly factor 2
LOC100550649	720	733	748	871	772	781	transcription factor Sp3
LOC100548137	801	752	852	727	728	781	PR domain zinc finger protein 1
FAM69A	647	779	703	798	749	780	family with sequence similarity 65, member B
PARP16	929	733	905	723	712	780	poly (ADP-ribose) polymerase family, member 16
LOC104916026	576	807	550	761	757	780	protein ADP-ribosylarginine hydrolase-like
LOC104912747							mucosa-associated lymphoid tissue lymphoma translocation protein 1-like
	1102	899	936	837	828	780	
LOC104912332	519	926	559	993	762	780	myomegalin
ATP6AP2	922	799	941	715	870	780	ATPase, H+ transporting, lysosomal accessory protein 2
VPS13C	641	643	740	820	656	780	vacuolar protein sorting 13 homolog C (S. cerevisiae)
LOC104914290	798	753	755	778	792	779	intersectin-1
MBTD1	713	715	759	772	664	779	mbt domain containing 1
LYRM1	827	707	791	714	838	778	LYR motif containing 1
GPATCH2L	892	749	815	806	810	778	G patch domain containing 2
NOTCH1	989	748	969	857	829	778	notch 1
BDH2	753	902	862	815	888	778	3-hydroxybutyrate dehydrogenase, type 2
CD82	692	775	798	775	708	777	CD81 molecule
LOC100543540	746	701	741	700	688	776	ficolin-2-like
SH3KBP1	715	623	729	662	624	776	SH3-domain kinase binding protein 1
ME1	576	575	652	732	813	776	malic enzyme 1, NADP(+)-dependent, cytosolic
GUCD1	666	691	824	972	770	775	guanylate cyclase activator 1C
MED9	968	741	862	651	762	775	mediator complex subunit 9
GTF3C2							
	948	783	874	683	758	775	general transcription factor IIIC, polypeptide 1, alpha 220kDa
TICRR	971	704	974	644	679	775	TOPBP1-interacting checkpoint and replication regulator
ING5	681	802	662	749	665	775	inhibitor of growth family, member 4
ARID4B	756	780	859	878	721	775	AT rich interactive domain 4B (RBP1-like)
STXBP1	951	679	867	882	872	774	syntaxin binding protein 1
LOC100544913	760	716	799	778	645	774	EH domain-containing protein 3
MLLT10							myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 10
	829	689	791	705	733	774	
OSMR	900	805	833	831	871	774	oncostatin M receptor
ZCCHC9	711	748	736	619	549	774	zinc finger, CCHC domain containing 9
GNG5	834	631	819	601	716	774	guanine nucleotide binding protein (G protein), gamma 4
FBF1	813	760	775	770	726	774	fatty acid hydroxylase domain containing 2
RHOBTB3	572	898	664	769	1171	773	Rho-related BTB domain containing 3
PTPLB							protein tyrosine phosphatase-like (proline instead of catalytic arginine), member b
	1007	824	857	680	684	773	
LOC104911236	795	812	829	840	818	772	autophagy-related protein 2 homolog B-like
TMEM233	480	498	544	661	383	772	transmembrane protein 233
XKRX	668	773	725	609	841	772	XK, Kell blood group complex subunit-related, X-linked
LOC100540873	718	617	800	654	644	771	hydroxysteroid 11-beta-dehydrogenase 1-like protein

DSN1	961	728	897	632	619	771	desmoglein 2
BB55	747	968	962	764	578	771	Bardet-Biedl syndrome 5
MRPS18B	850	708	771	629	712	771	mitochondrial ribosomal protein S18B
UNC50	753	778	790	716	720	771	unc-50 homolog (C. elegans)
NAA30	821	754	835	746	819	771	N(alpha)-acetyltransferase 30, NatC catalytic subunit
SMARCA1							SWI/SNF related, matrix associated, actin dependent regulator of
	866	819	928	801	745	770	chromatin, subfamily a, member 1
LOC100545397	589	854	601	894	804	770	natriuretic peptides B-like
DIP2A	798	739	703	754	680	770	deiodinase, iodothyronine, type III
LOC104914614							
	914	850	704	667	793	770	cytochrome c oxidase assembly factor 3 homolog, mitochondrial
ABLIM1	724	830	797	960	678	770	actin binding LIM protein 1
KIAA1191	829	657	808	679	861	770	KIAA1161 ortholog
WDR24	931	698	817	738	788	770	WD repeat domain 24
CPPED1	751	713	741	800	857	769	coproporphyrinogen oxidase
RRM2B	746	587	744	640	863	769	ribonucleotide reductase M2 B (TP53 inducible)
DPP9	926	677	863	668	720	769	dipeptidyl-peptidase 8
F3	595	672	565	786	514	769	coagulation factor II (thrombin) receptor-like 3
MRPL35	818	775	779	709	729	769	mitochondrial ribosomal protein L35
LAPTM5	831	605	815	781	912	769	lysosomal protein transmembrane 4 beta
APBA3							
	859	804	832	743	880	768	amyloid beta (A4) precursor protein-binding, family A, member 3
PTDSS1	876	782	856	770	821	768	phosphatidylserine synthase 1
LOC104916499	681	705	772	908	722	768	RNA-binding protein 24-B-like
ZNF280D	687	700	782	779	673	768	zinc finger protein 280D
LOC100539883							
	925	719	836	730	898	767	ras-specific guanine nucleotide-releasing factor RalGPS1-like
CXCR5	870	810	841	726	925	767	chemokine (C-X-C motif) receptor 4
SQRDL	745	759	696	962	819	767	sulfide quinone reductase-like (yeast)
FAM3C	862	751	885	728	706	766	family with sequence similarity 3, member B
RABL3	785	693	789	704	737	766	RAB, member of RAS oncogene family-like 3
LOC104916116	1059	772	920	690	825	765	stress-induced-phosphoprotein 1-like
SCPEP1	884	853	852	762	892	765	serine carboxypeptidase 1
SC5D	853	528	832	584	719	765	sterol-C5-desaturase
ABHD12	817	692	771	691	620	764	abhydrolase domain containing 12
WASL	875	768	843	744	775	764	Wiskott-Aldrich syndrome-like
PDIK1L	719	579	723	749	648	764	PDLIM1 interacting kinase 1 like
SRGAP1	871	712	862	738	760	763	SLIT-ROBO Rho GTPase activating protein 1
PIK3R4	921	718	839	714	784	763	phosphoinositide-3-kinase, regulatory subunit 4
LOC104911729	768	750	798	778	711	763	serine/threonine-protein kinase tousled-like 1
COQ6	620	681	714	656	619	762	coenzyme Q5 homolog, methyltransferase (S. cerevisiae)
AGGF1	681	705	738	717	588	762	angiogenic factor with G patch and FHA domains 1
L3MBTL2	794	706	745	622	645	762	l(3)mbt-like 1 (Drosophila)
BCL7B	680	724	678	701	674	762	B-cell CLL/lymphoma 7B
ATF3	956	1391	803	1128	597	762	activating transcription factor 3
GPR125	874	648	798	645	696	761	G protein-coupled receptor 124
ZFP36L1	1040	759	888	841	781	761	ZFP36 ring finger protein-like 1
LOC104914527	737	699	707	719	683	761	ankyrin repeat and SAM domain-containing protein 1A-like
TNPO1	736	607	848	759	653	761	transportin 1
LOC104911121	650	667	675	641	644	761	tetratricopeptide repeat protein 17-like
FAM160B1	809	737	786	713	662	760	family with sequence similarity 160, member A2
OSER1	797	772	785	858	855	760	oxidative stress responsive serine-rich 1
TMEM241	650	770	693	703	768	760	transmembrane protein 241
LOC104912780	901	921	877	732	822	760	thrombospondin type-1 domain-containing protein 4-like
RALGPS2	1027	651	1031	755	775	760	Ral GEF with PH domain and SH3 binding motif 2
DNMT1	938	717	836	728	755	760	dynamin binding protein
LOC100544221	817	655	807	645	686	760	cadherin-4
AMACR	633	579	750	593	552	760	alpha-methylacyl-CoA racemase
DDX47	988	747	904	698	813	760	DEAD (Asp-Glu-Ala-Asp) box polypeptide 46
ABHD5	734	689	751	640	688	760	abhydrolase domain containing 5
TRPC4AP							transient receptor potential cation channel, subfamily C, member 4
	840	771	794	904	836	760	associated protein
MMAA	791	641	764	735	775	760	methylmalonic aciduria (cobalamin deficiency) cblA type
LOC104911442	1130	976	1067	505	649	760	uncharacterized LOC104911442
LOC100543206	774	741	760	800	716	759	feather keratin 1-like
LOC104910833	942	763	883	732	751	759	uncharacterized LOC104910833
CERCAM	869	916	803	703	771	759	cerberus 1, DAN family BMP antagonist
LOC104909977	740	584	783	716	987	759	uncharacterized LOC104909977
PKDCC	700	589	794	676	881	759	protein kinase domain containing, cytoplasmic
MYC	721	589	731	539	821	759	v-myc avian myelocytomatosis viral oncogene homolog
NOS1AP	1124	717	1081	755	1149	759	nitric oxide synthase 1 (neuronal) adaptor protein
ZNF839	789	738	755	710	707	758	zinc finger protein 839
TMEM186	842	668	792	677	813	758	transmembrane protein 186
LOC104912114	712	691	849	844	757	758	protein eva-1 homolog C-like
LOC100545312	909	746	823	742	836	758	two pore calcium channel protein 2-like
LOC104913019	801	750	813	722	703	758	solute carrier family 12 member 4-like
AHCYL2	760	708	767	710	911	758	adenosylhomocysteine-like 2
FAM135A	1115	880	963	764	688	758	family with sequence similarity 134, member C
MBD5	821	825	860	972	796	757	methyl-CpG binding domain protein 5

DNAJB1	1067	789	872	838	949	757	Dnaj (Hsp40) homolog, subfamily A, member 4
TUBGCP3	819	706	811	628	627	757	tubulin, gamma complex associated protein 3
BRD4	1269	873	973	930	830	757	bromodomain containing 3
YARS2	917	656	812	689	793	757	tyrosyl-tRNA synthetase 2, mitochondrial
TIPRL	869	704	814	695	706	757	TOR signaling pathway regulator
SAP30BP	891	710	838	696	845	756	SAP30 binding protein
REXO1	866	758	798	766	760	756	REX1, RNA exonuclease 1 homolog (S. cerevisiae)
CHST14	855	635	826	601	745	756	carbohydrate (chondroitin 4) sulfotransferase 13
CDC42EP1	844	869	735	807	749	756	CDC42 binding protein kinase beta (DMPK-like)
MPG	640	720	728	725	699	756	N-methylpurine-DNA glycosylase
LOC100548529	555	554	629	838	959	756	claw keratin-like
CAMTA1							
	900	683	781	717	680	756	calmodulin regulated spectrin-associated protein family, member 2
INTS7	890	716	853	675	665	756	integrator complex subunit 6
WBP4	849	726	756	634	738	755	WW domain binding protein 4
MPP3							
	628	879	688	846	435	755	membrane protein, palmitoylated 3 (MAGUK p55 subfamily member 3)
CCDC134	676	648	725	591	645	755	coiled-coil domain containing 13
NSRP1	769	794	680	749	706	755	nuclear speckle splicing regulatory protein 1
ZHX3	867	865	815	881	824	755	zinc fingers and homeoboxes 3
PRMT5	951	627	766	603	740	754	protein arginine methyltransferase 5
LOC100540623	771	719	688	641	696	754	synaptonemal complex protein SC65-like
SLC4A7							
	899	839	775	666	772	753	solute carrier family 4, sodium bicarbonate cotransporter, member 7
CCDC93	1053	727	1003	721	874	753	coiled-coil domain containing 92
NKRF	949	709	769	583	746	753	NFKB repressing factor
POFUT1	901	806	828	678	684	753	protein O-fucosyltransferase 1
NFATC1							
	705	1307	832	1027	728	753	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 1
LOC104910246	976	692	924	684	689	753	uncharacterized LOC104910246
LOC100548064	805	794	777	800	753	752	proline dehydrogenase 1, mitochondrial-like
LOC100545218	729	695	718	696	712	752	BRCA2 and CDKN1A-interacting protein
ING1	746	726	798	771	654	752	inverted formin, FH2 and WH2 domain containing
DNTTIP1	821	753	834	751	728	752	DNA nucleotidylexotransferase
DDX20	852	685	781	758	701	752	DEAD (Asp-Glu-Ala-Asp) box polypeptide 18
SLC43A2							
	785	716	839	952	598	751	solute carrier family 43 (amino acid system L transporter), member 2
TSKU	868	630	890	630	733	751	tsukushi, small leucine rich proteoglycan
LOC104909834	845	726	788	708	698	751	pre-mRNA-processing factor 17-like
LOC100544252	817	666	826	646	793	751	nebulin
FOXO4	693	798	761	976	673	751	forkhead box O3
INPP5K	919	739	849	646	776	750	inositol polyphosphate-5-phosphatase J
CUL4A	705	778	815	782	708	750	cullin 3
LYRM7	553	669	694	659	511	750	LYR motif containing 7
FKBP14	809	682	770	609	674	749	FK506 binding protein 10, 65 kDa
VPS26B	1130	798	887	662	801	749	vacuolar protein sorting 26 homolog B (S. pombe)
RRP7A	816	671	702	633	643	749	ribosomal RNA processing 7 homolog A (S. cerevisiae)
MYH11	889	1320	804	1085	1120	749	myosin, heavy chain 11, smooth muscle
KLHDC1	635	685	717	668	626	749	Kruppel-like factor 8
C9Hxorf56	808	659	732	633	721	749	chromosome 9 open reading frame, human C8orf48
LMCD1	909	867	835	580	747	749	LMBR1 domain containing 2
CSNK1G2	900	678	759	709	798	749	casein kinase 1, gamma 1
AR	817	1432	717	974	934	749	androgen receptor
HSCB	725	657	723	702	792	749	heat shock factor binding protein 1-like 1
NHLRC2	722	643	731	808	716	748	NHL repeat containing 2
TMEM259	891	752	861	772	847	748	transmembrane protein 259
LOC104917240	989	603	945	728	794	748	T-complex protein 1 subunit gamma
XRCC6							
	785	676	805	722	779	748	X-ray repair complementing defective repair in Chinese hamster cells 6
SRPK2	839	673	838	654	718	748	SRSF protein kinase 2
NME7	845	968	771	770	663	747	NME/NM23 family member 7
VIMP	780	747	817	629	702	747	VCP-interacting membrane protein
LOC104916025	526	783	527	991	536	747	acetylcholinesterase-like
NAPG							
	750	726	737	717	783	747	N-ethylmaleimide-sensitive factor attachment protein, gamma
LOC104915345	798	694	819	585	565	747	uncharacterized LOC104915345
MTFMT	841	756	779	677	710	746	mitochondrial methionyl-tRNA formyltransferase
MVB12B	681	644	660	767	732	745	multivesicular body subunit 12B
LOC100542686	701	775	731	760	720	745	glucagon-like
LARS2	978	810	950	716	731	745	leucyl-tRNA synthetase
RNF126	1005	647	826	657	739	745	ring finger protein 126
SPRTN	759	752	745	705	737	744	SprT-like N-terminal domain
LOC100541081	1469	911	1046	639	1042	744	lipid phosphate phosphatase-related protein type 3
FOXO1	834	670	872	699	740	743	forkhead box N4
CEP250	826	659	792	687	685	743	centrosomal protein 192kDa
LOC104915908	705	731	622	577	642	743	2-oxoglutarate dehydrogenase, mitochondrial-like
PDE4B	495	796	544	804	825	743	phosphodiesterase 4B, cAMP-specific
ZDHHC8	831	773	864	679	750	742	zinc finger, DHHC-type containing 8
ZBTB47	699	716	719	572	716	742	zinc finger and BTB domain containing 47

LOC104916313	805	924	755	717	782	742	uncharacterized LOC104916313
PCBP4	761	662	791	737	720	742	poly(rC) binding protein 4
PPWD1							
	775	584	814	544	547	742	peptidylprolyl isomerase domain and WD repeat containing 1
NSMAF							
	758	738	748	769	636	742	neutral sphingomyelinase (N-SMase) activation associated factor
ZNF410	864	730	791	728	765	742	zinc finger protein 410
LPAR4	736	701	742	650	709	742	lysophosphatidic acid receptor 4
INSIG2	871	726	830	727	739	741	insulin induced gene 1
NSUN4	766	613	693	605	673	741	NOP2/Sun domain family, member 4
RECQL	906	613	787	611	743	741	RecQ helicase-like
ADORA2A	874	568	826	675	843	741	adenosine A2a receptor
LOC100549326	608	655	687	795	782	740	UDP-glucuronosyltransferase 2C1-like
BTC	801	1107	814	827	764	740	BTB (POZ) domain containing 9
LOC100550744	722	647	691	631	680	739	ubiquitin-conjugating enzyme E2 variant 3-like
LOC104916247	934	789	875	741	848	739	chromosome unknown open reading frame, human C1orf43
RNF219	806	618	811	637	683	739	ring finger protein 219
ACAD8	621	881	666	829	723	739	acyl-CoA dehydrogenase family, member 8
NEK2	924	661	896	637	646	738	NIMA-related kinase 2
RPE	832	660	801	647	769	738	ribulose-5-phosphate-3-epimerase
TANGO2	695	765	665	723	563	738	transport and golgi organization 2 homolog (Drosophila)
ATAD2B	819	686	829	729	739	738	ATPase family, AAA domain containing 2B
PAK3	863	661	784	777	853	737	p21 protein (Cdc42/Rac)-activated kinase 3
MRPL53	655	595	623	661	779	737	mitochondrial ribosomal protein L53
ADAMTS19							
	660	560	644	629	577	737	ADAM metalloproteinase with thrombospondin type 1 motif, 19
MTFP1	751	856	751	721	804	737	mitochondrial fission process 1
SNX4	830	751	820	749	725	737	sorting nexin 4
LOC104912982	831	754	761	694	709	737	uncharacterized LOC104912982
LOC100545319	621	596	668	702	673	736	ras-related protein Rab-10-like
LOC104914188	786	564	714	667	680	736	PR/SET domain 2
PCOLCE2	821	1020	771	860	816	736	procollagen C-endopeptidase enhancer 2
ALDH5A1	653	601	668	727	772	736	aldehyde dehydrogenase 5 family, member A1
APOOL	805	704	744	702	713	736	apolipoprotein O-like
SLC9A6							
	741	709	749	738	778	736	solute carrier family 9, subfamily A (NHE6, cation proton antiporter 6), member 6
KCTD15	662	698	760	751	627	735	potassium channel tetramerization domain containing 14
LOC100547767	857	795	801	886	720	735	palmitoyltransferase ZDHHC3-like
SPICE1	883	726	823	716	808	735	spindle and centriole associated protein 1
USE1	840	634	777	623	797	735	unconventional SNARE in the ER 1 homolog (S. cerevisiae)
RIC1	750	683	724	740	676	734	RAB6A GEF complex partner 1
LOC104911429	847	722	842	700	671	734	protein FAM171A1
LOC104910078	855	827	924	710	741	734	tensin-3-like
ARSK	582	739	748	670	488	734	arylsulfatase family, member K
TRMT2B	809	649	799	680	855	733	tRNA methyltransferase 2 homolog B (S. cerevisiae)
GEMIN6	817	666	725	626	718	733	gem (nuclear organelle) associated protein 5
LOC100551292	718	635	663	682	739	733	arginine and glutamate-rich protein 1
POLR1C	766	629	680	657	614	733	polymerase (RNA) I polypeptide C, 30kDa
KBTBD12	390	648	525	714	763	733	kelch repeat and BTB (POZ) domain containing 11
LOC104916241	738	767	746	671	694	733	B-cell receptor-associated protein 31-like
RNF25	852	725	774	679	736	732	ring finger protein 25
SCAF4	907	764	811	731	762	732	SR-related CTD-associated factor 4
LOC104910043	783	722	746	688	707	732	cell division cycle 5-like protein
LOC104914995	658	710	631	707	790	732	phosphoglucomutase-like protein 5
BRAT1	796	673	691	694	607	732	BRCA1 associated protein
LOC100542537	867	655	835	601	623	731	inactive phospholipase C-like protein 2
CSNK1E	960	679	824	788	818	731	casein kinase 1, delta
INTS9	819	664	840	681	810	731	integrator complex subunit 8
AMPD3	1463	760	1347	994	1014	730	adenosine monophosphate deaminase 3
AKAP13	867	671	897	849	767	730	A kinase (PRKA) anchor protein 13
IRF2BPL	849	742	855	692	816	730	interferon regulatory factor 2 binding protein 2
TCEA1	887	629	796	624	620	730	transcription elongation factor A (SII), 1
SGK3	906	695	826	607	781	730	serum/glucocorticoid regulated kinase family, member 3
LOC100540989	758	702	750	744	734	730	laminin subunit alpha-4-like
ARHGAP11A	862	596	889	622	624	730	Rho GTPase activating protein 11A
LARP7	788	650	825	670	727	729	La ribonucleoprotein domain family, member 6
IRF8	652	888	681	886	640	729	interferon regulatory factor 7
ABHD10	660	611	750	603	586	729	abhydrolase domain containing 10
GALM	774	688	761	580	718	729	galactokinase 2
SCARF1	847	750	859	764	838	728	scavenger receptor class F, member 1
ATG2B	734	676	707	872	731	728	autophagy related 2B
PLCL2	574	625	680	717	635	728	phospholipase C-like 2
BTBD10	706	615	680	650	697	728	BTB (POZ) domain containing 1
LOC104909725	847	695	756	638	840	728	uncharacterized LOC104909725
SOX13	570	516	653	686	510	727	SRY (sex determining region Y)-box 13
TMCO1	746	721	735	649	661	727	transmembrane and coiled-coil domains 1
SOC55	781	752	808	690	862	727	suppressor of cytokine signaling 5
S1PR3	708	583	806	650	577	726	sphingosine-1-phosphate receptor 3
RAB30	715	845	752	846	629	726	RAB30, member RAS oncogene family

SHCBP1	857	570	872	602	642	726	SHC SH2-domain binding protein 1
SSH2	796	812	726	989	870	726	slingshot protein phosphatase 2
KLF3	773	795	751	720	711	726	Kruppel-like factor 2
ZNF281	876	609	821	638	720	726	zinc finger protein 281
RNF128	793	750	841	945	859	726	ring finger protein 128, E3 ubiquitin protein ligase
PARS2	626	661	463	591	533	725	prolyl-tRNA synthetase 2, mitochondrial (putative)
SDF4	883	745	855	660	691	725	stromal cell derived factor 4
LOC104914006	822	492	843	704	817	725	receptor-type tyrosine-protein phosphatase T-like
HDAC3	865	769	801	710	762	725	histone deacetylase 2
GAR1	801	688	731	591	634	724	GTPase activating protein and VP59 domains 1
BICC1	859	762	801	739	681	724	BicC family RNA binding protein 1
PHOSPHO1	592	618	676	662	805	724	phosphatase, orphan 1
BOD1	712	722	729	650	700	723	biorientation of chromosomes in cell division 1
SPTY2D1							
	821	707	825	675	704	723	SPT2, Suppressor of Ty, domain containing 1 (S. cerevisiae)
PTCD1	748	692	746	661	625	723	pentatricopeptide repeat domain 1
TOR1B	820	776	734	663	661	723	torsin family 1, member B (torsin B)
SLC35E1	884	749	783	687	781	723	solute carrier family 35, member E1
RNF144A	803	639	794	697	650	723	ring finger protein 144A
TPPP	315	740	438	678	594	723	tubulin polymerization promoting protein
UCK2	1024	620	843	603	700	722	uridine-cytidine kinase 2
LOC100549728	947	628	878	608	764	722	neuronal membrane glycoprotein M6A
PPM1M	667	817	705	860	731	722	protein phosphatase, Mg2+/Mn2+ dependent, 1M
EXT2	751	591	761	724	789	722	exostosin glycosyltransferase 1
ANXA4	593	771	575	672	690	722	annexin A4
LOC104910588	884	713	820	558	576	721	uncharacterized LOC104910588
FZD8	784	701	730	579	714	721	frizzled class receptor 7
LOC104915049	700	636	803	662	554	721	focadhesin-like
CEP131	937	783	816	667	677	721	centrosomal protein 128kDa
LOC104915043	705	583	713	565	721	721	uncharacterized LOC104915043
RHOT2	778	680	751	631	653	720	ras homolog family member T2
COL2A1	765	2317	1163	656	641	720	collagen, type XXVIII, alpha 1
CHMP1A	757	763	722	685	727	720	choroideremia (Rab escort protein 1)
LOC104914173	747	835	758	783	785	720	transmembrane protein 269
NFYA	676	579	661	628	617	720	nuclear transcription factor Y, alpha
CHCHD1	729	699	697	608	665	720	choline O-acetyltransferase
TAF9B							TAF9B RNA polymerase II, TATA box binding protein (TBP)-associated factor, 31kDa
	764	710	757	634	763	720	factor, 31kDa
LOC100547734	830	581	821	627	676	720	MOB-like protein phocein
LOC100547442	932	712	914	674	709	720	ADP-ribosylation factor GTPase-activating protein 1-like
CTTNBP2NL	813	902	843	726	797	720	cortactin binding protein 2
TNFRSF4	746	653	762	530	573	719	tumor necrosis factor receptor superfamily, member 4
NFIX	862	621	807	574	695	719	nuclear factor I/X (CCAAT-binding transcription factor)
C8H10orf88	770	700	715	676	737	719	chromosome 8 open reading frame, human C10orf76
EDA	929	827	759	731	807	719	epithelial cell transforming 2
RGMA	1297	811	1094	757	897	718	repulsive guidance molecule family member a
DUSP19	690	619	643	622	750	718	dual specificity phosphatase 18
OSBP2	719	751	633	594	727	718	oxysterol binding protein 2
RABEPK	766	725	748	590	625	718	Rab9 effector protein with kelch motifs
LOC104911744	421	842	426	646	704	718	uncharacterized LOC104911744
UFSP2	782	620	802	685	874	718	UFM1-specific peptidase 2
LRRC75B	454	447	457	490	361	718	leucine rich repeat containing 75B
ARID2	613	688	688	854	649	718	AT rich interactive domain 2 (ARID, RFX-like)
CLTA	768	625	769	552	511	718	calsynenin 3
PDE3B	810	736	775	668	665	717	phosphodiesterase 3B, cGMP-inhibited
FAM122B	786	703	794	736	802	717	family with sequence similarity 120B
LOC104914281	1124	738	847	553	702	717	uncharacterized LOC104914281
LOC104914035	888	680	889	749	795	716	proteasomal ubiquitin receptor ADRM1
COMMD6	770	692	809	750	732	716	COMM domain containing 4
PADI1	808	665	725	604	668	716	peptidyl arginine deiminase, type I
LOC100540081	679	747	748	691	711	716	V-type proton ATPase subunit d 2
WDR41	722	617	785	602	569	716	WD repeat domain 41
TINAGL1	826	754	727	683	778	716	tubulointerstitial nephritis antigen-like 1
PPIL3	718	633	660	616	612	716	peptidylprolyl isomerase (cyclophilin)-like 3
LOC100540635	703	635	737	684	659	716	retinol dehydrogenase 14-like
TBC1D8	751	795	679	799	591	716	TBC1 domain family, member 8 (with GRAM domain)
NEURL1B	1000	726	882	651	815	716	neutralized E3 ubiquitin protein ligase 1B
L3HYPDH	558	631	717	599	739	716	L-2-hydroxyglutarate dehydrogenase
SMPD4							sphingomyelin phosphodiesterase 4, neutral membrane (neutral sphingomyelinase-3)
	800	688	727	615	619	716	sphingomyelinase-3
NPHP3	752	718	767	724	730	715	nephronophthisis 3 (adolescent)
LOC104914009	903	633	804	630	641	715	protein FAM83D-like
VPS18	640	625	660	605	704	715	vacuolar protein sorting 18 homolog (S. cerevisiae)
ORC6	1077	702	827	506	550	715	origin recognition complex, subunit 6
RABGAP1	793	722	749	735	722	715	RAB GTPase activating protein 1
GNG12	904	755	805	723	787	715	guanine nucleotide binding protein (G protein), gamma 11
SRGAP2	729	661	716	652	652	715	SLIT-ROBO Rho GTPase activating protein 2
LOC100550588	750	441	724	529	574	714	7-dehydrocholesterol reductase-like
PGM2L1	575	608	640	692	852	714	phosphoglucomutase 2-like 1

MED22	851	739	731	715	792	714	mediator complex subunit 22
FAM178A	860	823	832	673	788	714	family with sequence similarity 177, member A1
ACBD5	823	731	802	749	772	714	acyl-CoA binding domain containing 5
LOC104912585	576	906	615	472	462	714	period circadian protein homolog 2-like
LOC104914176	516	635	633	744	606	713	HMG box-containing protein 1-like
SCARB2	777	825	783	884	942	713	scavenger receptor class B, member 2
LOC104914466	1002	1066	808	889	959	713	protein phosphatase 1 regulatory subunit 12B-like
NSMCE1	762	644	738	646	683	713	non-SMC element 1 homolog (S. cerevisiae)
ANAPC7	833	688	783	636	699	713	anaphase promoting complex subunit 7
LOC100550849	591	700	631	716	691	713	cationic amino acid transporter 2-like
GPAT2	786	731	780	736	703	713	glycerol-3-phosphate acyltransferase, mitochondrial
TIMM9							
	684	777	771	877	642	713	translocase of inner mitochondrial membrane 9 homolog (yeast)
TMED3							
	766	650	756	493	548	712	transmembrane emp24 protein transport domain containing 3
DDX51	795	707	699	575	653	712	DEAD (Asp-Glu-Ala-Asp) box helicase 5
TCAIM	850	642	790	663	774	712	T cell activation inhibitor, mitochondrial
ZRSR2							
	719	752	698	688	712	712	zinc finger (CCH type), RNA-binding motif and serine/arginine rich 2
FASTKD2	759	578	787	571	747	712	FAST kinase domains 1
MARVELD1	941	870	792	615	681	712	MARVEL domain containing 1
ECD	969	746	845	706	826	712	EBNA1 binding protein 2
PIK3R6	744	749	719	796	1106	712	phosphoinositide-3-kinase, regulatory subunit 6
LOC100549552	608	548	600	574	736	711	granzyme A-like
STIM1	760	778	745	721	770	711	stromal interaction molecule 1
RIF1	1045	687	815	588	639	711	replication timing regulatory factor 1
LOC100539632	716	716	666	787	795	711	rho GTPase-activating protein 39-like
ATG3	784	663	806	717	641	710	autophagy related 3
LAMP2	797	683	808	746	768	710	lysosomal-associated membrane protein 1
ZNF639	763	723	782	661	681	710	zinc finger protein 639
GUCY183	836	727	813	754	782	710	guanylate cyclase 1, soluble, alpha 3
LOC104913908	834	734	847	676	676	710	uncharacterized LOC104913908
MKRN2	789	632	702	598	649	709	makorin ring finger protein 2
MAFF							
	714	712	912	577	644	709	v-maf avian musculoaponeurotic fibrosarcoma oncogene homolog F
LOC100539830	649	684	632	958	622	709	SH3-containing GRB2-like protein 3-interacting protein 1
RSF1	771	693	777	788	719	709	remodeling and spacing factor 1
SMARCD2							
	834	741	820	703	727	709	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 2
FAF2	786	682	720	586	653	709	Fas (TNFRSF6) associated factor 1
KLHL34	1302	1099	1302	948	1178	709	kelch-like family member 33
MRPS18C	758	703	710	613	579	709	mitochondrial ribosomal protein S18C
BNIP3L	692	577	691	726	661	709	BCL2/adenovirus E1B 19kDa interacting protein 3-like
SNRK	706	710	721	677	684	708	SNF related kinase
LOC104910147	561	592	590	530	519	708	uncharacterized LOC104910147
YTHDF2	949	661	823	718	746	708	YTH N(6)-methyladenosine RNA binding protein 2
SNCAIP	751	595	847	599	580	708	synuclein, alpha interacting protein
E2F8	728	590	714	572	480	708	E2F transcription factor 7
POLR2H	805	633	718	564	629	707	polymerase (RNA) II (DNA directed) polypeptide H
ATPAF1	850	677	755	647	707	707	ATP synthase mitochondrial F1 complex assembly factor 1
LOC100542534	569	648	723	680	661	707	aquaporin-5
TOP1MT	690	547	755	553	617	707	topoisomerase (DNA) I, mitochondrial
SNX30	687	670	719	673	687	707	sorting nexin family member 30
ZNF330	790	646	714	613	686	707	zinc finger protein 330
LOC104913363	428	432	468	534	1045	707	uncharacterized LOC104913363
MINPP1	748	635	799	628	748	707	multiple inositol-polyphosphate phosphatase 1
TCTN3	715	695	771	667	670	706	tectonic family member 3
RNF8	783	671	672	664	739	706	ring finger protein 8, E3 ubiquitin protein ligase
KLF2	800	996	820	643	796	705	Kruppel-like factor 15
CD44	1328	719	1057	601	710	705	CD40 ligand
SGMS1	733	742	738	765	747	705	sphingomyelin synthase 1
LOC104911919	577	720	661	775	795	705	ankyrin-3-like
IRF2	618	721	673	757	708	705	interferon regulatory factor 1
LOC104915197	525	798	583	662	605	704	uncharacterized LOC104915197
PACSLN2	836	654	775	674	676	704	protein kinase C and casein kinase substrate in neurons 2
MYO9A	849	634	748	703	671	704	myosin IXA
MNAT1	723	759	715	656	636	704	MNAT CDK-activating kinase assembly factor 1
MACROD2	726	815	765	826	814	704	MACRO domain containing 2
MYEOV2	809	827	816	762	920	704	myeloma overexpressed 2
LOC100542665	765	599	688	555	683	704	retinal dehydrogenase 1-like
IPMK	784	664	743	660	682	703	interaction protein for cytohesin exchange factors 1
DSCC1	1052	668	953	680	653	703	Down syndrome cell adhesion molecule like 1
LOC104916525	912	738	847	668	702	703	nuclear receptor subfamily 2, group F, member 2
ACTR8	975	687	901	754	900	703	ARP8 actin-related protein 8 homolog (yeast)
UMPS	767	665	763	607	645	703	uridine monophosphate synthetase
LOC104911647	771	629	720	601	628	703	SPATS2-like protein
RBFA	664	631	692	665	724	703	ribosome binding factor A (putative)
SARAF	781	707	741	707	681	703	store-operated calcium entry-associated regulatory factor
MVK	846	491	793	516	600	703	mevalonate kinase

LOC104915431	855	821	770	701	861	702	protein scribble homolog
TMEM214	826	717	734	669	645	702	transmembrane protein 214
KLHDC10	721	620	701	604	668	701	kelch domain containing 1
DDX41	751	677	735	621	698	701	DEAD (Asp-Glu-Ala-Asp) box polypeptide 4
SLC15A4							
	723	666	744	639	690	701	solute carrier family 15 (oligopeptide transporter), member 4
SNAPC5							
	931	755	872	659	779	701	small nuclear RNA activating complex, polypeptide 5, 19kDa
LOC104914264	927	638	872	648	679	701	uncharacterized LOC104914264
CCDC15	917	633	742	537	583	700	coiled-coil domain containing 149
CTSH	801	643	740	600	712	700	cathepsin E
PAPD4	647	619	783	621	515	700	PAP associated domain containing 4
ITGAV	773	622	689	756	703	700	integrin, alpha 9
YIPF6	745	738	735	571	613	700	Yip1 domain family, member 6
TRIB1	641	794	751	941	690	699	tribbles pseudokinase 1
ERCC4	757	666	717	684	693	699	excision repair cross-complementation group 3
SOD3	630	766	702	767	571	699	superoxide dismutase 3, extracellular
CACUL1	893	653	803	688	893	699	cactin, spliceosome C complex subunit
FAM149B1	889	663	833	593	682	699	family with sequence similarity 149, member A
ACY1	574	659	617	756	769	698	aminoacylase 1
ZBTB38	775	672	848	699	627	698	zinc finger and BTB domain containing 38
TKT	839	683	797	636	670	698	transketolase
FAM134C	715	701	757	669	766	698	family with sequence similarity 134, member B
LOC100549299	927	819	808	630	707	698	RNA-binding protein 38-like
IP6K1	757	693	734	631	644	698	inturned planar cell polarity protein
LOC104917419	651	693	743	629	564	698	basic immunoglobulin-like variable motif-containing protein
LOC104916463	602	734	615	776	741	698	uncharacterized LOC104916463
NCOA5	822	673	724	609	684	697	nuclear receptor coactivator 5
LOC104913636	1187	754	822	691	630	697	intercellular adhesion molecule 1-like
COPS7B	818	580	807	581	679	697	COP9 signalosome subunit 7A
FAM179B	831	705	762	800	806	697	family with sequence similarity 179, member A
LOC104909336	736	610	633	551	568	697	netrin-G1-like
NSMCE4A	717	664	705	680	627	696	non-SMC element 4 homolog A (S. cerevisiae)
DEGS1	844	699	849	657	760	696	differentially expressed in FDCP 8 homolog (mouse)
PTTG1	859	600	845	602	603	696	pituitary tumor-transforming 1
LOC104912731	720	815	703	604	678	696	uncharacterized LOC104912731
HAUS3	968	686	902	592	628	696	HAUS augmin-like complex, subunit 2
PFKL	765	548	707	528	717	696	phosphofructokinase, liver
COLGALT2	939	627	844	655	612	695	collectin sub-family member 12
LOC100543303							
	777	629	763	633	681	695	bifunctional 3'-phosphoadenosine 5'-phosphosulfate synthase 1
PLP1	449	652	395	712	544	695	proteolipid protein 1
LOC104914288	550	629	508	732	918	695	uncharacterized LOC104914288
PCGF6	720	778	734	632	678	695	polycomb group ring finger 6
LOC104913391	696	536	654	705	738	695	uncharacterized LOC104913391
TBC1D20	751	792	718	724	680	695	TBC1 domain family, member 20
TBCA	746	683	813	589	548	695	tubulin folding cofactor A
TMEM97	694	662	732	613	643	694	transmembrane protein 97
DGCR14	755	695	741	663	709	694	diacylglycerol O-acyltransferase 2
WRN	850	692	689	772	651	694	Werner syndrome, RecQ helicase-like
TRNAU1AP	525	593	564	608	622	694	tRNA selenocysteine 1 associated protein 1
TERF2	814	705	810	638	723	694	telomeric repeat binding factor 2
MAP4K5	718	614	720	613	613	694	mitogen-activated protein kinase kinase kinase 5
TMEM47	785	639	739	608	667	694	transmembrane protein 47
LOC100547196	580	642	641	737	594	694	uncharacterized LOC100547196
FAM13A	739	626	730	791	659	694	family with sequence similarity 136, member A
CTAGE5	862	692	790	762	745	694	cleavage stimulation factor, 3' pre-RNA, subunit 3, 77kDa
LOC100543546							
	715	708	744	736	813	694	solute carrier family 1 (glial high affinity glutamate transporter), member 3
CYLD	767	668	788	672	770	694	cysteine/histidine-rich 1
CCDC51	714	639	707	598	666	693	coiled-coil domain containing 50
MAML1	806	666	735	732	738	693	mastermind-like 1 (Drosophila)
ATAD2	993	707	872	636	643	693	ATPase family, AAA domain containing 2
LOC100546809	908	669	822	717	617	693	cordon-bleu protein-like 1
ZNF704	958	666	819	598	588	693	zinc finger protein 704
FAM63A	825	745	735	679	706	693	family with sequence similarity 60, member A
GCLC	1045	614	801	766	751	693	glucokinase (hexokinase 4)
SFRP2	900	744	717	652	740	693	secreted frizzled-related protein 2
AEBP2	746	650	742	643	662	693	AE binding protein 2
LOC104916160	785	623	699	615	818	692	natterin-3-like
LOC104914604	805	638	742	899	755	692	puromycin-sensitive aminopeptidase-like protein
PDPK1	748	618	792	746	675	692	3-phosphoinositide dependent protein kinase 1
C1D	850	628	746	545	689	692	chromosome 19 open reading frame, human C9orf91
SPATA13	588	375	518	627	816	691	spermatogenesis associated 13
UBA5	749	590	723	548	642	691	ubiquitin-like modifier activating enzyme 5
RARRES1	699	717	724	576	835	691	retinoic acid receptor responder (tazarotene induced) 1
ATXN1L	871	717	791	698	709	691	ataxin 1-like
VBP1	844	589	802	608	675	691	von Hippel-Lindau binding protein 1
LOC104913882	758	699	858	782	730	691	telomerase-binding protein EST1A-like

GBGT1							
	523	709	556	661	682	691	golgi brefeldin A resistant guanine nucleotide exchange factor 1
CMC1							
	967	693	934	666	913	690	cytidine monophosphate N-acetylneuraminic acid synthetase
PTPRB	773	801	735	762	801	690	protein tyrosine phosphatase, receptor type, B
RTC8	732	580	694	669	748	690	RNA 2',3'-cyclic phosphate and 5'-OH ligase
MPV17L2	802	703	781	663	729	690	MPV17 mitochondrial membrane protein-like 2
MRS2	713	634	656	563	628	690	MRS2 magnesium transporter
C3H5orf22	678	615	732	521	584	690	chromosome 3 open reading frame, human C18orf8
POGZ	729	697	730	737	699	690	pogo transposable element with ZNF domain
MCEE	649	669	656	679	682	690	methylmalonyl CoA epimerase
SDHAF2	797	779	752	598	721	689	succinate dehydrogenase complex assembly factor 2
IL17RC	756	863	757	763	899	689	interleukin 17 receptor A
TECPR2	713	617	742	674	770	689	tectonin beta-propeller repeat containing 2
MRE11A	838	633	787	600	655	689	MRE11 meiotic recombination 11 homolog A (S. cerevisiae)
LOC104916259	512	405	550	505	828	689	sortilin-like
EFHC1	793	727	767	550	623	689	EF-hand domain family, member B
ADHFE1	659	730	632	682	812	689	alcohol dehydrogenase, iron containing, 1
ASPEN	679	795	999	774	1212	689	asporin
TARS2	750	625	655	636	661	689	threonyl-tRNA synthetase 2, mitochondrial (putative)
LOC104915463	1235	864	961	840	771	689	dual specificity testis-specific protein kinase 1-like
SERINC2	523	829	505	560	633	689	serine incorporator 2
COQ7	673	637	666	598	739	689	coenzyme Q6 monooxygenase
PPP4R1	857	671	827	733	663	688	protein phosphatase 4, regulatory subunit 1
C1GALT1C1							core 1 synthase, glycoprotein-N-acetylgalactosamine 3-beta-galactosyltransferase 1
	744	761	735	590	647	688	Yae1 domain containing 1
YAE1D1	712	603	776	642	701	688	oxysterol binding protein-like 11
OSBPL11	836	757	779	730	751	688	inhibin, beta C
INIP	741	572	757	542	593	688	G3BP stress granule assembly factor 2
LOC104910623	754	669	688	606	632	687	ubiquitin associated and SH3 domain containing B
UBASH3B	1019	534	953	643	768	687	nucleolar protein 6 (RNA-associated)
NOL6	789	528	763	601	555	687	glycerol kinase
GKAP1	628	610	716	778	548	687	ADP-dependent glucokinase
ADPGK	837	647	794	572	671	687	cytoskeleton associated protein 2
CKAP2L	900	642	867	640	662	686	uncharacterized LOC104912007
LOC104912007	1266	1326	1070	1335	944	686	retinol saturase (all-trans-retinol 13,14-reductase)
RETSAT	966	824	867	644	796	686	
OGFOD3							
	897	656	794	609	640	686	2-oxoglutarate and iron-dependent oxygenase domain containing 3
CHID1	756	753	715	669	608	686	cysteine-rich hydrophobic domain 2
CSF1R	770	743	790	677	870	686	colony stimulating factor 1 (macrophage)
MIF							
	876	704	768	475	587	686	macrophage migration inhibitory factor (glycosylation-inhibiting factor)
PLEKHA8							pleckstrin homology domain containing, family A (phosphoinositide binding specific) member 8
	701	528	712	687	633	685	cell division cycle associated 7-like
CDCA8	746	627	678	544	477	685	solute carrier family 9, subfamily A (NHE8, cation proton antiporter 8), member 8
SLC9A8							
	647	647	636	599	593	685	
ADAMTS10							
	607	550	662	501	686	685	ADAM metalloproteinase with thrombospondin type 1 motif, 10
KDEL2	826	687	676	687	809	685	KDEL (Lys-Asp-Glu-Leu) containing 1
LDB2	803	787	843	745	706	685	LIM domain binding 1
SLC35E3	955	604	829	560	762	685	solute carrier family 35, member E3
RNF122	688	617	649	510	544	685	ring finger protein 122
CNPPD1	739	723	744	643	705	684	2',3'-cyclic nucleotide 3' phosphodiesterase
TMEM180	778	563	735	579	734	684	transmembrane protein 180
LOC104909943	716	704	697	644	653	684	uncharacterized LOC104909943
DUSP14	770	758	704	656	595	684	dual specificity phosphatase 12
FCHO2	651	677	674	674	623	684	FCH domain only 1
ID1	864	696	715	455	705	684	immature colon carcinoma transcript 1
UCKL1	884	736	805	773	746	684	uridine-cytidine kinase 1-like 1
SNX10	735	753	692	915	954	684	sorting nexin 10
LOC104915840	725	673	701	660	652	684	serine/arginine-rich splicing factor 7
SNAPC1							
	701	622	663	663	641	684	small nuclear RNA activating complex, polypeptide 1, 43kDa
SMTNL1	648	779	661	556	620	683	smoothelin-like 1
TNFSF10	657	751	677	935	691	683	tumor necrosis factor (ligand) superfamily, member 10
MCAT	531	596	602	725	722	683	malonyl CoA:ACP acyltransferase (mitochondrial)
TUBGCP5	666	589	667	695	584	683	tubulin, gamma complex associated protein 5
MRPL30	749	688	752	653	669	683	mitochondrial ribosomal protein L30
CC2D2A	760	633	750	800	721	683	coiled-coil and C2 domain containing 1B
ZSWIM8	805	738	743	719	703	683	zinc finger, SWIM-type containing 8
WDR55	700	700	678	702	746	682	WD repeat domain 55
LOC104913965	749	759	634	726	742	682	NF-kappa-B-activating protein-like
LOC100544745	742	602	689	684	635	682	cGMP-dependent protein kinase 2-like
PEX14	749	616	713	606	639	681	peroxisomal biogenesis factor 14
FASTKD1	564	714	578	751	581	681	Fas-activated serine/threonine kinase
STX7	754	715	792	725	761	681	syntaxin 7
WHSC1L1	808	675	757	747	733	681	Wolf-Hirschhorn syndrome candidate 1-like 1

ARHGEF18	685	678	682	653	603	681	Rho/Rac guanine nucleotide exchange factor (GEF) 18
THUMPD2	544	600	568	633	649	681	THUMP domain containing 2
SUPT4H1	845	719	784	650	666	681	suppressor of Ty 4 homolog 1 (S. cerevisiae)
TNRC6C	784	756	727	796	696	680	trinucleotide repeat containing 6C
MTFR2	795	534	771	552	566	680	mitochondrial fission regulator 2
TK2	883	621	787	599	657	679	thymidine kinase 2, mitochondrial
LOC104913304	805	578	666	616	711	679	E3 ubiquitin-protein ligase RNF130-like
APEH	631	665	639	641	597	679	acylaminoacyl-peptide hydrolase
STX1A	752	624	770	591	710	679	syntaxin 1A (brain)
LOC104915970	833	714	784	681	773	679	signal transducer and activator of transcription 6-like
SIDT2	692	853	645	825	633	679	SID1 transmembrane family, member 2
FN3KRP	689	563	752	633	628	679	fructosamine 3 kinase
GOLGA5	669	604	655	587	596	678	golgin A4
ARL5B	691	664	797	707	604	678	ADP-ribosylation factor-like 5B
EVA1B	803	683	800	598	746	678	eva-1 homolog A (C. elegans)
MYNN	723	690	705	622	619	678	myoneurin
WDR47	787	778	768	700	649	678	WD repeat domain 47
LOC100544511	846	780	871	615	707	678	transmembrane protein 2-like
VAT1	757	683	759	712	690	677	vesicle amine transport 1
CALML4	597	647	654	692	791	677	calmodulin 2 (phosphorylase kinase, delta)
DUSP16	712	817	724	775	695	677	dual specificity phosphatase 15
SPPL3	670	673	696	653	629	677	signal peptide peptidase like 3
TCIRG1							T-cell, immune regulator 1, ATPase, H+ transporting, lysosomal V0 subunit A3
	752	626	698	676	634	677	
LOC104917602	767	649	762	737	704	677	zinc finger MYM-type protein 2-like
TMEM231	545	551	571	530	507	677	transmembrane protein 231
MALT1	668	578	667	614	539	677	MALT1 paracaspase
METTL2A	701	623	711	645	670	676	methyltransferase like 2A
LHX6	813	696	754	792	763	676	LIM homeobox 5
ZNF648	725	555	720	537	620	676	zinc finger protein 648
SCN4B	641	831	603	761	605	676	sodium channel, voltage-gated, type IV, beta subunit
CEBPB	340	317	562	635	304	676	chromodomain protein, Y-like 2
ZHX2	758	643	808	755	650	675	zinc fingers and homeoboxes 2
ZC3HC1	712	656	687	701	596	674	zinc finger, C3HC-type containing 1
SIN3A	797	735	829	698	727	674	SIN3 transcription regulator family member A
DDX52	774	628	713	610	689	674	DEAD (Asp-Glu-Ala-Asp) box polypeptide 51
TBC1D8B	755	682	753	679	658	674	TBC1 domain family, member 8B (with GRAM domain)
SLC25A14							
	717	620	642	526	625	673	solute carrier family 25 (mitochondrial carrier, brain), member 14
PLEKHF1							pleckstrin homology domain containing, family F (with FYVE domain) member 1
	748	745	758	746	654	673	
LCP1	760	464	694	638	698	673	ligand dependent nuclear receptor corepressor-like
LPL	955	816	787	911	650	673	lipoprotein lipase
ATPAF2	658	588	607	565	653	673	ATP synthase mitochondrial F1 complex assembly factor 2
LOC100545053	452	742	513	942	474	673	putative protein FAM172B
LOC100542094	803	616	781	733	611	672	myosin-3-like
UFM1	684	614	743	584	687	672	ubiquitin-fold modifier 1
PDE4C	562	1079	537	663	804	672	phosphodiesterase 4C, cAMP-specific
LOC100546458	802	701	732	736	713	672	spastin
CTDSP1							CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A)
	746	878	722	835	766	672	phosphatase, subunit 1
LOC100545957	825	759	666	637	674	672	transcription factor 12
DENND6B	493	614	514	517	628	672	DENN/MADD domain containing 6A
LOC104915233	847	583	993	509	601	672	uncharacterized LOC104915233
LOC104909339	548	768	610	960	673	671	muscular LMNA interacting protein
PARP3	514	862	515	580	495	671	poly (ADP-ribose) polymerase family, member 3
RDH10	770	621	719	616	627	671	retinol dehydrogenase 10 (all-trans)
POR	806	715	761	608	683	671	P450 (cytochrome) oxidoreductase
TES	809	544	739	529	658	671	testis derived transcript (3 LIM domains)
WDR92	767	577	718	551	688	670	WD repeat domain 92
LOC104912434	414	654	444	688	518	670	uncharacterized LOC104912434
IFT80	750	592	699	645	593	670	intraflagellar transport 57
SEC24B	634	615	654	640	632	670	SEC24 family member B
ZBTB43	714	665	702	677	660	670	zinc finger and BTB domain containing 43
LOC104911651	860	536	782	586	712	670	nucleoporin Nup37-like
SHOC2	652	647	674	618	619	670	soc-2 suppressor of clear homolog (C. elegans)
MSTN	531	480	520	785	909	670	myostatin
ANPEP	741	806	642	791	581	670	alanyl (membrane) aminopeptidase
EOGT	755	615	784	628	706	670	enhancer of yellow 2 homolog (Drosophila)
PRKAR1A	829	635	791	709	685	670	protein kinase, cAMP-dependent, regulatory, type I, alpha
LLGL1	853	697	761	707	773	669	Lix1 homolog (chicken)
KIFC3	806	790	722	591	678	669	kinesin-associated protein 3
PLBD1	576	553	733	625	597	669	phospholipase B domain containing 1
CACYBP	769	547	730	552	655	669	CDK2-associated, cullin domain 1
POLR3A							
	615	473	624	604	650	669	polymerase (RNA) III (DNA directed) polypeptide A, 155kDa
ZNF521	677	729	766	696	649	669	zinc finger protein 521
CAPN15	803	582	820	631	659	669	calpain 14
NFYB	793	651	815	624	667	669	nuclear transcription factor Y, beta

ORMDL3	697	628	704	659	743	668	ORMDL sphingolipid biosynthesis regulator 3
LOC104916715	788	678	712	596	602	668	RNA-binding protein FUS-like
SLC25A13							
	770	601	692	550	605	668	solute carrier family 25 (aspartate/glutamate carrier), member 13
NDST2							
	792	739	757	784	731	668	N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 2
RAB27A	762	608	714	602	590	668	RAB27A, member RAS oncogene family
LOC100542208	743	504	669	556	621	668	histone H2B 7
LOC104913585	691	422	707	434	509	667	uncharacterized LOC104913585
AVEN	710	634	714	559	611	667	apoptosis, caspase activation inhibitor
EFEMP1	810	1083	701	832	836	667	EF-hand and coiled-coil domain containing 1
AP1S2	635	683	642	708	652	667	adaptor-related protein complex 1, sigma 2 subunit
FNIP1	398	535	523	724	473	667	fibronectin type III domain containing 9
LOC104915861	734	656	566	485	623	667	vitamin K epoxide reductase complex subunit 1-like
LOC100542873	769	611	693	615	630	666	taste receptor type 1 member 3
RBM18	717	608	745	601	671	666	RNA binding motif protein 18
SLC38A7	987	660	850	614	925	666	solute carrier family 38, member 7
FGFR1OP	943	629	880	596	760	666	fibroblast growth factor receptor 1
SGPP1	1119	661	894	673	740	666	sphingosine-1-phosphate phosphatase 1
LOC100541374	865	1001	806	755	594	665	interferon-induced guanylate-binding protein 1-like
GTF3C4	774	648	734	662	681	665	general transcription factor IIIC, polypeptide 3, 102kDa
ALG6	685	673	663	601	548	665	ALG6, alpha-1,3-glucosyltransferase
CCNF	779	588	709	566	615	665	cyclin E2
PTPRF	1012	652	899	593	677	664	protein tyrosine phosphatase, receptor type, F
GMNN	903	683	845	578	649	664	geminin coiled-coil domain containing
NAB1	829	724	781	663	756	664	NGFI-A binding protein 1 (EGR1 binding protein 1)
KIAA0922	794	651	764	681	669	664	KIAA0907 ortholog
TGOLN2	942	707	812	619	738	664	trans-golgi network protein 2
LRR8A	722	634	727	615	680	664	leucine rich repeat containing 8 family, member A
ATRIP	867	654	777	571	705	664	ATR interacting protein
ABHD2	752	753	697	708	669	664	abhydrolase domain containing 2
PBX3	636	674	711	619	740	664	pre-B-cell leukemia homeobox 3
LOC104909621	750	622	747	587	701	664	serine/threonine-protein kinase D3-like
PDCD10	685	686	756	655	656	664	programmed cell death 10
DCAF4	765	681	713	604	684	664	DDB1 and CUL4 associated factor 17
LRWD1	844	675	823	657	651	664	leucine-rich repeats and WD repeat domain containing 1
DCUN1D1	752	654	705	643	721	663	dynactin 6
EVL	906	705	848	666	845	663	ecotropic viral integration site 2B
ZNF143	750	660	683	653	679	663	zinc finger protein 143
UBXN11	738	824	689	664	670	663	UBX domain protein 11
MAP2K4	704	630	641	614	629	663	mitogen-activated protein kinase kinase 4
LOC100546341	661	655	678	813	755	662	olfactory receptor 51E2-like
C21H17orf85	700	628	660	627	624	662	chromosome 21 open reading frame, human C17orf64
ASNS	841	498	1038	489	595	662	asparagine synthetase (glutamine-hydrolyzing)
RAB29	748	582	748	600	664	662	RAB29, member RAS oncogene family
E2F2	757	644	764	647	570	662	E2F transcription factor 1
LOC104915926	1041	583	679	614	679	662	protein-lysine methyltransferase METTL21B-like
LOC100543567	722	646	798	550	473	662	VPS39, HOPS complex subunit
CCDC59	701	531	656	507	639	662	coiled-coil domain containing 58
AADAT	730	559	726	582	738	661	aminoadipate aminotransferase
ESPL1	919	574	777	628	651	661	endothelial cell-specific molecule 1
FOXRED1	650	692	588	607	568	661	forkhead box P4
LOC100542676	841	755	813	767	732	661	histone H2A type 2-B
FBXL3	636	622	684	717	612	661	F-box and leucine-rich repeat protein 22
CHERP	925	650	813	722	702	661	checkpoint kinase 2
ACAD11	756	609	677	580	584	661	acyl-CoA dehydrogenase family, member 11
LOC100546401	722	636	692	611	666	661	DNA repair-scaffolding protein-like
GGNBP2							gamma-glutamyl hydrolase (conjugase, folylpolyglutamylyl hydrolase)
	774	629	754	644	714	661	superkiller viralicidic activity 2-like 2
LOC104914891	666	551	744	671	496	661	protein CASP-like
LOC104913857	634	806	711	695	720	661	CDGSH iron sulfur domain 1
CISD2	728	590	682	574	601	661	zinc finger and BTB domain containing 21
ZBTB21	549	685	545	668	480	660	aldose reductase-like
LOC100545977	668	610	682	669	590	660	far upstream element (FUSE) binding protein 3
FUCA1	617	668	640	578	559	660	DNA-damage regulated autophagy modulator 1
DRAM2	734	661	637	616	648	660	SET domain, bifurcated 2
SETDB2	655	573	649	567	587	660	
SLC37A4							
	364	559	426	729	833	659	solute carrier family 37 (glucose-6-phosphate transporter), member 4
SNX13	697	637	754	670	622	659	sorting nexin 13
LOC100541500	526	532	626	724	540	658	tetratricopeptide repeat protein 27-like
TAZ	655	703	691	647	739	658	tafazzin
GFOD1	753	770	733	671	697	658	G elongation factor, mitochondrial 1
LOC104916155	714	630	676	552	620	658	ubiquitin thioesterase OTUB1-like
ARF6	891	655	759	638	682	658	ADP-ribosylation factor 6
MXD4	553	593	698	734	694	658	MAX dimerization protein 4
LAMTOR5							
	677	726	660	587	594	657	late endosomal/lysosomal adaptor, MAPK and MTOR activator 4
IFT122	491	604	530	614	557	657	interferon-related developmental regulator 1

LOC100550739	548	517	609	730	712	657	band 4.1-like protein 3
LOC100540340	788	618	803	629	687	657	interactor of little elongation complex ELL subunit 2
PHF2	638	622	687	841	550	657	PHD finger protein 2
DAPK3	775	963	693	760	638	657	death-associated protein kinase 2
SMIM12	655	713	633	721	782	657	small integral membrane protein 12
ZMYM2	508	648	584	872	774	657	zinc finger, MYM-type 2
LOC104911143	656	631	656	619	653	657	RNA-binding protein Nova-1
HIP1	786	702	724	691	613	656	histidine triad nucleotide binding protein 3
SGOL1	788	598	772	576	567	656	shugoshin-like 1 (S. pombe)
LOC104909245	789	609	727	679	629	656	cell division cycle 5-like protein
RFC1	850	593	833	563	605	656	replication factor C (activator 1) 1, 145kDa
STIM2	724	613	718	595	653	656	stromal interaction molecule 2
KCNMA1	603	998	538	885	569	656	potassium channel, subfamily K, member 9
FAM160A1	660	555	618	560	621	655	family with sequence similarity 159, member A
FAAH	601	631	655	726	493	655	fatty acid 2-hydroxylase
NUFIP1							
	776	572	719	555	609	655	nuclear fragile X mental retardation protein interacting protein 1
PDE6D	780	667	720	601	642	655	phosphodiesterase 6D, cGMP-specific, rod, delta
HSD17B7	686	412	680	385	572	655	hydroxysteroid (17-beta) dehydrogenase 4
ASXL2	728	648	763	695	712	654	additional sex combs like transcriptional regulator 2
ABHD13	720	651	703	634	607	654	abhydrolase domain containing 13
CCND1	807	588	727	500	604	654	cyclin B3
LGMN	736	677	693	625	728	654	leucine-rich repeat LGI family, member 3
CNOT7	809	580	717	600	630	654	CCR4-NOT transcription complex, subunit 6
RAD17	602	601	647	542	458	654	RAD17 homolog (S. pombe)
DDX31	735	590	714	660	562	654	DEAD (Asp-Glu-Ala-Asp) box polypeptide 28
UPRT							
	720	531	655	489	596	654	uracil phosphoribosyltransferase (FUR1) homolog (S. cerevisiae)
GJC1	753	609	654	559	747	653	gap junction protein, beta 5, 31.1kDa
VAMP7	664	625	637	648	638	653	vesicle-associated membrane protein 7
LOC104917024	595	718	564	592	618	653	5'-AMP-activated protein kinase subunit gamma-1-like
USP32	544	602	602	661	635	652	ubiquitin specific peptidase 32
LOC100544143	792	643	750	548	666	652	gamma-aminobutyric acid receptor subunit pi-like
PSMG2	738	581	709	583	706	652	proteasome (prosome, macropain) assembly chaperone 2
FBXO18	671	590	679	652	645	652	F-box protein 16
NSDHL	560	257	609	334	335	652	NAD(P) dependent steroid dehydrogenase-like
PPP1R2	649	604	680	666	787	652	protein phosphatase 1, regulatory (inhibitor) subunit 2
ATG9A	758	745	748	771	807	652	autophagy related 9A
KIAA0907	766	620	702	707	669	652	KIAA0895-like ortholog
NUDT2							
	508	573	604	558	463	651	nudix (nucleoside diphosphate linked moiety X)-type motif 2
LRKK2	700	669	677	662	623	651	leucine-rich repeat kinase 2
LRRC28	653	568	703	604	601	651	leucine rich repeat containing 28
LOC100540713	689	614	631	603	671	651	intestinal-type alkaline phosphatase-like
MDM2	636	566	632	644	647	651	MDM2 proto-oncogene, E3 ubiquitin protein ligase
DCTN5	668	630	682	565	620	651	dynactin 4 (p62)
PCNXL4	710	726	650	622	534	651	pecanex-like 4 (Drosophila)
AQP1	773	776	824	745	602	650	aquaporin 1 (Colton blood group)
NTSR1	668	704	553	711	814	650	neurotensin receptor 1 (high affinity)
TBC1D12	707	575	687	597	669	650	TBC1 domain family, member 12
VPS33A	646	633	667	641	638	650	vacuolar protein sorting 33 homolog A (S. cerevisiae)
LOC104914601							
	642	593	578	754	816	650	voltage-dependent L-type calcium channel subunit beta-1-like
ATP6V0B	559	648	572	568	547	650	ATPase, H+ transporting, lysosomal 21kDa, V0 subunit b
NUP35	731	573	644	562	544	650	nucleoporin 35kDa
RPRD2	911	699	776	713	722	650	regulation of nuclear pre-mRNA domain containing 2
P4HA2	701	661	706	650	669	650	prolyl 4-hydroxylase, alpha polypeptide II
DDO	593	658	824	670	947	649	DNA damage-induced apoptosis suppressor
SLC25A15							
	848	534	799	582	696	649	solute carrier family 25 (mitochondrial carrier; ornithine transporter)
UBLCP1	693	637	703	624	614	649	member 15
CHCHD6	780	543	685	539	661	649	ubiquitin-like domain containing CTD phosphatase 1
RFW2							
	734	625	739	558	745	649	coiled-coil-helix-coiled-coil-helix domain containing 4
KLHL7	594	568	581	692	640	649	ring finger and WD repeat domain 2, E3 ubiquitin protein ligase
SH3PXD2B	676	656	591	611	661	649	kelch-like family member 6
PDCD2	683	538	629	506	609	649	SH3 and PX domains 2B
NUP43	828	664	759	531	589	649	programmed cell death 2
HGSNAT							
	516	603	685	527	571	648	nucleoporin 43kDa
FMR1	720	614	711	655	611	648	hepatocyte growth factor-regulated tyrosine kinase substrate
CHM	740	607	665	652	613	648	fibromodulin
NARFL	676	552	668	592	600	648	cell adhesion molecule L1-like
C9Hxorf57	850	623	768	641	634	648	nuclear prelamin A recognition factor-like
LOC104915872	388	594	360	537	369	648	chromosome 9 open reading frame, human CXorf56
LOC100551160	594	645	580	613	561	648	uncharacterized LOC104915872
PLEKHJ1	799	586	747	587	667	647	sideroflexin-1-like
ATF1	700	598	693	627	622	647	pleckstrin homology domain containing, family J member 1
SBNO2	702	571	745	594	784	647	activating transcription factor 1
							strawberry notch homolog 2 (Drosophila)

AK3	738	686	612	691	694	647	adenylate kinase 3
E2F4	830	613	768	581	724	647	E2F transcription factor 2
PARN	1159	890	867	947	1150	646	poly(A)-specific ribonuclease
COMMD4	664	695	659	624	669	646	COMM domain containing 2
HACE1	651	541	727	646	694	646	hyaluronan binding protein 4
TMEM87A	737	653	764	699	614	646	transmembrane protein 87A
LOC104913102	659	572	660	522	631	646	high mobility group protein HMGI-C-like
MPHOSPH8	826	751	772	674	719	645	M-phase phosphoprotein 8
ZNF830	645	607	633	610	597	645	zinc finger protein 830
CHCHD4	731	596	649	511	582	645	coiled-coil-helix-coiled-coil-helix domain containing 3
THBS1	672	708	753	577	490	645	thrombospondin 1
THBD	880	819	771	677	744	645	thrombomodulin
CDCA3	876	704	744	602	591	644	cell division cycle associated 2
ADAMTS8							
	451	625	752	434	489	644	ADAM metalloproteinase with thrombospondin type 1 motif, 8
ZMYM3	659	697	621	660	665	644	zinc finger, MYM-type 3
SMC5	702	584	722	533	431	644	structural maintenance of chromosomes 5
ATP10A	769	610	691	505	607	643	ATPase, class V, type 10A
PMM1	593	565	576	553	625	643	phosphomannomutase 1
LOC104909858	634	612	597	585	554	643	reticulon-4-interacting protein 1
MRPS10	636	516	631	537	555	642	mitochondrial ribosomal protein S10
MFAP2	680	797	793	548	489	642	microfibrillar-associated protein 2
PLCE1	591	547	591	629	548	642	phospholipase C, epsilon 1
MED30	667	679	677	629	615	642	mediator complex subunit 30
LOC100548678	676	565	696	709	560	641	feather keratin 1-like
PPARA	525	701	581	692	644	641	peroxisome proliferator-activated receptor alpha
RBMX2	761	601	591	625	563	641	RNA binding motif protein, X-linked 2
TMEM117	800	651	773	716	755	641	transmembrane protein 117
ITGA4	591	386	622	435	612	641	integrin, alpha 11
LOC104913873							
	708	571	699	513	628	640	endoplasmic reticulum-Golgi intermediate compartment protein 2-like
TTL7	604	663	597	730	727	640	tubulin tyrosine ligase-like family, member 7
BEND5	478	650	558	587	493	640	BEN domain containing 5
LOC104915066	659	607	675	593	567	640	transmembrane protein 2-like
LOC100541714	775	763	673	602	538	640	serine/threonine-protein kinase greatwall
DUSP1	703	845	672	824	752	639	dihydrouridine synthase 4-like (S. cerevisiae)
ZNF362	696	639	712	674	729	639	zinc finger protein 362
RAB4A	586	761	550	610	531	639	RAB4A, member RAS oncogene family
FPG5	737	596	672	500	585	639	forkhead box S1
CSRP2BP	638	621	626	659	564	639	cysteine and glycine-rich protein 2
TNFAIP1	722	594	660	612	640	639	tumor necrosis factor, alpha-induced protein 1 (endothelial)
RRN3							
	761	541	726	536	637	639	RRN3 RNA polymerase I transcription factor homolog (S. cerevisiae)
NIPSNAP3A	913	525	883	541	650	639	nipsnap homolog 3A (C. elegans)
DOLPP1	499	671	533	586	558	638	dolichol kinase
CLCN7	487	510	572	537	459	638	chloride channel, voltage-sensitive 6
HSPB7	398	1648	504	1065	471	638	heat shock 27kDa protein 3
ZBTB46	845	684	730	689	739	638	zinc finger and BTB domain containing 46
THRA	670	620	625	601	685	638	thyroid hormone receptor, alpha
TMEM161A	631	614	590	553	715	638	transmembrane protein 161A
LOC104909917	689	525	688	692	717	638	sentrin-specific protease 6
FGD5	700	674	742	677	673	638	FYVE, RhoGEF and PH domain containing 3
UBE3C	743	642	755	722	662	638	ubiquitin protein ligase E3C
SAP30	868	678	808	639	564	638	Sin3A-associated protein, 30kDa
POLE3	797	565	704	482	545	638	polymerase (DNA directed), epsilon 3, accessory subunit
ZRANB2	658	550	639	632	578	638	zinc finger, RAN-binding domain containing 2
RCBTB1							
	756	552	726	578	614	638	regulator of chromosome condensation (RCC1) and BTB (POZ) domain containing protein 1
PDDC1	759	531	694	505	574	637	Parkinson disease 7 domain containing 1
SCARF2	674	638	691	557	677	637	scavenger receptor class F, member 2
EBF2	838	606	784	657	758	637	early B-cell factor 1
CWF19L1							
	683	598	666	563	551	637	CWC27 spliceosome-associated protein homolog (S. cerevisiae)
INPP4B	548	565	576	649	699	637	inositol polyphosphate-4-phosphatase, type I, 107kDa
LOC100550062	702	608	741	485	707	637	probable glutamate receptor
ZCCHC2	771	641	669	591	646	637	zinc finger, CCHC domain containing 2
ESCO2							
	811	635	758	552	541	636	establishment of sister chromatid cohesion N-acetyltransferase 1
NTAN1	681	632	689	572	630	636	N-terminal asparagine amidase
CPTP	643	517	606	536	554	636	carnitine palmitoyltransferase 2
LONRF3	731	717	734	574	579	636	LON peptidase N-terminal domain and ring finger 3
L2HGDH	584	575	596	596	552	635	kyphoscoliosis peptidase
TSSC4	635	563	597	532	530	635	tumor suppressing subtransferable candidate 4
THUMPD1	787	603	715	640	728	634	THUMP domain containing 1
LOC100541498	782	464	727	505	676	634	protein bicaudal D homolog 1
ORAI1	596	694	591	605	622	634	ORAI calcium release-activated calcium modulator 1
UBAC2	677	615	674	592	627	634	UBA domain containing 2
LOC100539246	702	673	731	666	621	633	sodium/calcium exchanger 1-like
FBXO38	635	626	638	655	618	633	F-box protein 34

NUBPL	598	546	601	504	450	633	nucleotide binding protein-like
TMEM222	682	604	644	568	589	633	transmembrane protein 222
NVL	752	624	711	569	658	633	nuclear VCP-like
ZFYVE1	510	669	608	738	705	632	zinc finger, FYVE domain containing 1
PANK2	649	643	642	591	587	632	pantothenate kinase 2
DCAF17	595	578	606	570	585	632	DDB1 and CUL4 associated factor 13
LOC100541118	847	583	729	664	745	632	regulator of G-protein signaling 9
PRPF38A	750	561	668	542	570	632	pre-mRNA processing factor 38A
TP53INP2	427	521	515	544	643	632	tumor protein p53 inducible nuclear protein 2
INSR	711	736	720	694	596	632	insulin-like 5
LOC104916204							
	578	594	586	477	504	632	histidine triad nucleotide-binding protein 2, mitochondrial-like
MTMR2	704	586	687	559	566	632	myotubularin related protein 2
DEDD	849	706	781	679	741	632	2,4-dienoyl CoA reductase 2, peroxisomal
LLPH	774	617	679	525	629	631	lethal giant larvae homolog 2 (Drosophila)
LOC100548270	600	563	798	479	597	631	arf-GAP with dual PH domain-containing protein 1-like
UNC119B	758	657	761	585	645	631	unc-119 homolog B (C. elegans)
LOC100538487	633	597	663	679	592	631	dedicator of cytokinesis protein 10
MAPKAPK5	715	568	653	604	622	631	mitogen-activated protein kinase-activated protein kinase 5
RGSS	711	1045	655	823	865	631	regulator of G-protein signaling 5
NAGA	698	588	770	498	668	631	N-acetylglactosaminidase, alpha-
OSTF1	722	538	707	520	611	631	osteoclast stimulating factor 1
RCL1	800	524	704	536	554	631	RNA terminal phosphate cyclase-like 1
LOC100544436	181	627	215	939	166	631	A-kinase anchor protein 7 isoform gamma-like
FAM110D	591	618	608	604	688	631	family with sequence similarity 110, member C
PLEKHG4							pleckstrin homology domain containing, family G (with RhoGef domain)
	732	649	621	573	623	631	member 4
LOC104916720	1111	468	907	388	695	631	keratin-associated protein 6-2-like
LOC100540939	845	461	837	493	706	630	claw keratin-like
ADAM9	795	573	656	573	714	630	ADAM metalloproteinase domain 9
TCN2	644	746	627	720	750	629	transcobalamin II
LOC104916533	675	716	673	804	899	629	IgGfC-binding protein-like
GATAD2A	876	674	778	674	725	628	GATA zinc finger domain containing 1
HSD17B4	549	390	569	452	497	628	hydroxysteroid (17-beta) dehydrogenase 2
CD99	707	716	712	651	656	628	CD96 molecule
LOC104912609							serine/threonine-protein phosphatase 2A regulatory subunit B" subunit
	551	578	526	651	560	628	alpha-like
ZNF292	624	606	650	659	614	628	zinc finger protein 292
SNIP1	623	614	650	570	561	628	Smad nuclear interacting protein 1
SNRNP40	879	637	787	577	615	628	small nuclear ribonucleoprotein 40kDa (U5)
FZD6	639	581	700	626	665	628	frizzled class receptor 5
FAM35A	621	606	667	729	645	628	family with sequence similarity 32, member A
PPRC1							peroxisome proliferator-activated receptor gamma, coactivator-related
	897	602	717	454	627	628	1
SUV420H1	502	531	577	534	549	627	suppressor of variegation 4-20 homolog 1 (Drosophila)
PRPF4	755	581	688	577	620	627	pre-mRNA processing factor 4
LATS1	736	640	688	653	644	627	linker for activation of T cells family, member 2
COMMD2	650	607	610	617	582	626	copper metabolism (Murr1) domain containing 1
FNIP2	662	684	665	750	610	626	folliculin interacting protein 1
APIP	702	627	680	599	696	626	APAF1 interacting protein
OXCT1	649	554	685	646	643	626	3-oxoacid CoA transferase 1
LOC104916685	656	519	606	486	598	626	KAT8 regulatory NSL complex subunit 2-like
IFT20	717	651	703	553	503	626	intraflagellar transport 172
HMGCL	599	652	598	604	596	626	high mobility group box 3
DNAAF5	663	570	629	560	591	626	dynein, axonemal, assembly factor 1
RIC8B	718	604	702	545	618	626	RIC8 guanine nucleotide exchange factor B
USP37	788	630	660	568	622	626	ubiquitin specific peptidase 37
ASB6	737	637	681	572	668	625	ankyrin repeat and SOCS box containing 6
NSL1	806	636	723	544	609	625	NSL1, MIS12 kinetochore complex component
LOC100546443	656	504	697	585	593	625	NEDD4-binding protein 2-like 2
RLTPR							RGD motif, leucine rich repeats, tropomodulin domain and proline-rich
	615	584	566	508	551	625	containing
ALK	819	609	603	529	467	625	anaplastic lymphoma receptor tyrosine kinase
KLHL20	807	628	734	564	613	625	kelch-like family member 2
BZRAP1	746	532	679	609	625	625	bystin-like
CFAP97	617	554	644	577	607	624	cilia and flagella associated protein 74
LOC104917220	826	645	762	547	705	624	zinc finger protein OZF-like
SLC35A4	625	608	548	620	701	624	solute carrier family 35, member A4
RNF149	769	593	687	589	664	623	ring finger protein 149
RHCE	709	618	633	670	783	623	Rh blood group, CcEe antigens
NECAP2	718	637	688	597	653	623	NECAP endocytosis associated 2
NKAP	718	669	683	571	639	623	NFKB activating protein
LOC104912856	624	640	624	555	502	623	uncharacterized LOC104912856
LOC104910882	586	552	537	733	560	623	dysferlin-like
CHAF1B	1018	620	916	473	667	623	chromatin assembly factor 1, subunit A (p150)
SMIM20	643	595	639	567	616	622	small integral membrane protein 20
BACH2							
	433	557	533	589	472	622	BTB and CNC homology 1, basic leucine zipper transcription factor 2
PAPD7	785	623	722	589	678	621	PAP associated domain containing 7

C20H17orf75	750	544	725	501	589	621	chromosome 20 open reading frame, human C17orf70
LOC104909947	485	682	478	867	628	621	dystonin-like
TMEM8C	589	412	703	609	593	621	transmembrane protein 8C
BRMS1L	776	561	685	509	594	621	BRX1, biogenesis of ribosomes, homolog (S. cerevisiae)
DERL2	718	654	658	561	646	621	derlin 1
LOC104915003	680	532	648	501	463	621	pumilio domain-containing protein KIAA0020 homolog
NENF	716	639	720	569	610	620	neudessin neurotrophic factor
KIAA1524	898	520	804	487	507	620	KIAA1522 ortholog
NFKBIA							nuclear factor of kappa light polypeptide gene enhancer in B-cells
	648	721	663	794	500	620	inhibitor, alpha
PIK3C3	552	484	618	570	446	620	phosphatidylinositol 3-kinase, catalytic subunit type 3
PANK4	534	569	546	618	623	620	pantothenate kinase 4
CTHRC1	685	606	528	538	500	620	cystathionine gamma-lyase
FAM193A	590	524	631	584	581	620	family with sequence similarity 192, member A
ERCC5	505	551	562	475	556	620	excision repair cross-complementation group 4
C19H9orf78	635	613	595	575	587	620	chromosome 19 open reading frame, human C9orf69
TERF2IP	701	584	659	544	639	619	telomeric repeat binding factor 2, interacting protein
CTDP1	711	632	689	659	631	619	CCCTC-binding factor (zinc finger protein)-like
EPS15L1	683	634	670	614	659	619	epidermal growth factor receptor pathway substrate 15
CD320	601	590	662	548	607	619	CD28 molecule
LSM14A	725	578	679	588	643	619	LSM14A, SCD6 homolog A (S. cerevisiae)
LOC100548228	555	558	666	620	509	618	protein-methionine sulfoxide oxidase MICAL3
LOC104909717	756	616	704	561	641	618	zinc finger protein 70-like
DPY30	695	565	690	570	602	618	dpy-19-like 4 (C. elegans)
USP44	643	686	642	699	649	618	ubiquitin specific peptidase 44
PELI1	632	614	612	550	640	618	pellino E3 ubiquitin protein ligase 1
NINJ1	409	555	368	565	295	618	ninjurin 1
FAM73B	609	567	543	558	602	618	family with sequence similarity 72, member A
DPH7	792	712	799	652	798	618	diphthamide biosynthesis 5
LOC104912562	554	560	561	555	524	618	uncharacterized LOC104912562
TTF2	667	503	596	509	545	617	transcription termination factor, RNA polymerase II
NCAPG2	776	585	749	540	554	617	non-SMC condensin II complex, subunit G2
SLC10A7	740	531	728	495	611	617	solute carrier family 10, member 7
BRAP	736	603	665	602	609	616	serine/threonine-protein kinase B-raf-like
C4H4orf27	907	638	745	508	591	616	chromosome 4 open reading frame, human C4orf19
DECR2	707	591	613	536	531	616	2,4-dienoyl CoA reductase 1, mitochondrial
ANAPC2	766	607	701	600	626	616	anaphase promoting complex subunit 2
SGPL1	703	641	679	587	468	616	sphingosine-1-phosphate lyase 1
UBL7	574	512	610	535	534	616	ubiquitin-like 7
PTGR2	557	417	552	460	461	616	prostaglandin reductase 2
FAF1	676	523	611	624	643	615	fatty acid desaturase 6
LOC100542691	756	702	713	597	566	615	uncharacterized LOC100542689
NUDT9							
	779	622	711	546	670	615	nudix (nucleoside diphosphate linked moiety X)-type motif 9
GPR157	652	666	656	1030	764	615	G protein-coupled receptor 156
MMD2	589	682	441	659	502	615	monocyte to macrophage differentiation-associated 2
KLHL12	699	606	643	592	649	615	kelch-like family member 11
TLE3	731	629	675	606	748	615	transducin-like enhancer of split 3
RAD51	733	595	771	528	490	615	RAD51 recombinase
UHRF1BP1L	631	576	594	573	564	614	UHRF1 binding protein 1-like
GPN3	757	595	726	541	635	614	GPN-loop GTPase 2
HELQ	494	502	652	599	512	614	helicase, lymphoid-specific
AFTPH	608	600	630	626	616	614	aftiphilin
CCDC167	621	583	696	496	549	614	coiled-coil domain containing 166
LOC104912897							inositol hexakisphosphate and diphosphoinositol-pentakisphosphate
	616	575	617	559	589	614	kinase 1-like
LOC100540965	708	658	736	598	683	614	putative RNA exonuclease NEF-sp
C2CD2	708	534	701	608	531	614	chromosome 29 open reading frame, human C17orf104
PQLC3	782	682	726	578	639	614	PQ loop repeat containing 3
SPATA20	616	572	587	577	574	614	spermatogenesis associated 20
ORMDL2	671	654	651	595	614	614	ORMDL sphingolipid biosynthesis regulator 2
LOC100550532	829	597	756	503	539	613	baculoviral IAP repeat-containing protein 5-like
RNF150	568	702	588	590	577	613	ring finger protein 150
LOC104917053	768	591	683	537	644	613	E3 ubiquitin-protein ligase HUWE1
TMEM203	639	676	673	612	635	612	transmembrane protein 203
FRMD6	746	678	669	559	639	612	FERM domain containing 5
PM20D1	554	493	545	494	435	612	peptidase M20 domain containing 1
LOC104909982	663	517	613	520	506	612	nucleolar protein 10
LOC104912330	697	514	637	521	556	612	phosphofurin acidic cluster sorting protein 2-like
SLK	675	617	684	681	611	612	STE20-like kinase
LOC100540915	680	620	610	541	588	612	protein NLRC5-like
GAB2	656	649	624	632	654	612	GRB2-associated binding protein 1
ZMI21	633	668	654	744	588	611	zinc finger, MIZ-type containing 1
MED20	727	560	671	534	671	611	mediator complex subunit 20
KCNH6							
	496	508	478	665	501	611	potassium voltage-gated channel, subfamily H (eag-related), member 5
STX18	705	556	712	584	618	611	syntaxin 18
MTRR							
	533	533	563	588	603	611	5-methyltetrahydrofolate-homocysteine methyltransferase reductase

NTSM	801	676	708	594	734	610	5',3'-nucleotidase, mitochondrial
CNP	1029	720	826	618	577	610	CCR4-NOT transcription complex, subunit 8
AIIG1	537	641	554	708	661	610	androgen-induced 1
RP2	717	509	691	517	574	610	retinitis pigmentosa 2 (X-linked recessive)
LOC104916438	672	777	622	685	612	610	UV excision repair protein RAD23 homolog A-like
GPATCH8	699	669	685	624	615	610	G patch domain containing 3
MED24	612	535	560	563	559	609	mediator complex subunit 24
DIAPH3	775	494	723	489	486	609	diaphanous-related formin 2
PXDN	647	521	652	764	624	608	peroxidase homolog (Drosophila)
RAB35	741	563	801	591	667	608	RAB35, member RAS oncogene family
ME3	703	875	628	693	581	608	malic enzyme 3, NADP(+)-dependent, mitochondrial
LOC104913034	668	506	649	475	490	608	condensin complex subunit 1-like
GTF2H3	750	525	683	462	559	608	general transcription factor IIF, polypeptide 1, 62kDa
TMEM8A	852	578	734	638	819	608	transmembrane protein 8A
ZNF462	466	449	572	628	482	607	zinc finger protein 462
FBXL20	633	656	664	717	644	607	F-box and leucine-rich repeat protein 2
CDK5RAP1	585	576	590	562	547	607	cyclin-dependent kinase 5, regulatory subunit 2 (p39)
LOC104910552	785	667	707	583	698	607	extracellular matrix protein FRAS1-like
BCOR	739	657	724	634	643	607	BCL6 corepressor
CETN3	597	612	701	592	509	607	centrin, EF-hand protein, 2
VEGFA	528	605	512	566	592	607	vascular endothelial growth factor A
VP551	633	541	644	645	606	607	vacuolar protein sorting 51 homolog (S. cerevisiae)
EXT1	723	591	676	551	595	607	exophilin 5
SLC41A1	678	532	623	604	767	606	solute carrier family 41 (magnesium transporter), member 1
DBF4	660	509	649	538	544	606	deleted in azoospermia-like
EDEM2	693	566	569	499	591	606	ER degradation enhancer, mannosidase alpha-like 1
RAPGEF5	685	793	651	721	662	606	Rap guanine nucleotide exchange factor (GEF) 5
METTL21C	470	688	478	776	379	605	methyltransferase like 21C
BHLHE40	380	494	600	441	431	605	basic helix-loop-helix family, member e40
HEBP1	794	616	731	696	692	605	HEAT repeat containing 6
LSM14B	675	501	622	546	529	605	LSM14B, SCD6 homolog B (S. cerevisiae)
LRSAM1	653	634	615	536	538	605	leucine rich repeat and sterile alpha motif containing 1
BAHD1	851	606	749	591	656	605	bromo adjacent homology domain containing 1
PLK4	771	540	762	540	580	605	polo-like kinase 4
PGM5	541	613	515	657	650	605	phosphoglucosyltransferase 5
SDC4	707	756	526	660	454	604	syndecan 4
LSM3							
	781	557	704	481	550	604	LSM3 homolog, U6 small nuclear RNA associated (S. cerevisiae)
LOC100543379	613	657	626	648	663	604	uncharacterized LOC100543367
FKBP10	838	619	824	571	623	603	fat storage-inducing transmembrane protein 2
CDON	684	618	611	536	581	603	cysteine dioxygenase type 1
LOC104916113	490	549	428	768	524	603	acetylcholinesterase-like
LOC104911780	599	504	594	514	591	603	corepressor interacting with RBP1 1-like
LOC104915838							
	597	586	522	432	601	603	solute carrier family 2, facilitated glucose transporter member 4-like
TMEM39A	706	612	669	509	585	603	transmembrane protein 39A
LOC104912108	589	617	632	559	503	603	semaphorin-3A-like
SURF2	676	556	611	569	498	602	surfeit 2
GZF1	644	617	556	571	543	602	glycogen synthase 2 (liver)
STYX	612	526	595	548	519	602	serine/threonine/tyrosine interacting protein
LOC104913441	534	575	555	524	582	602	uncharacterized LOC104913441
CZH5orf28	673	493	674	432	499	602	chromosome 2 open reading frame, human C18orf25
C1H21orf59	567	591	589	567	608	602	chromosome 1 open reading frame, human C21orf33
CCBL2	553	568	588	556	585	601	cysteine conjugate-beta lyase, cytoplasmic
PLAGL2	731	601	625	523	627	601	pleiomorphic adenoma gene-like 2
MAP2K5	574	642	629	586	532	601	mitogen-activated protein kinase kinase 5
RAPH1							
	809	496	809	552	580	601	Ras association (RalGDS/AF-6) and pleckstrin homology domains 1
ZMYM5	643	567	569	822	783	601	zinc finger, MYM-type 5
KIAA1468	724	587	683	597	656	600	KIAA1467 ortholog
LOC100543166	816	575	724	484	512	600	cytochrome P450 20A1
LOC104914617	603	577	581	625	651	600	V-type proton ATPase 116 kDa subunit a isoform 1-like
GIN54	835	601	741	620	683	600	GIN5 complex subunit 3 (Psf3 homolog)
ARV1	610	570	602	564	584	599	ARV1 homolog (S. cerevisiae)
GEN1	726	563	678	569	598	599	gem (nuclear organelle) associated protein 6
LOC104911746	496	530	560	568	525	599	transcription factor Sp3-like
ELTD1	673	640	702	679	618	599	elongator acetyltransferase complex subunit 6
NLE1	763	558	633	505	593	599	notchless homolog 1 (Drosophila)
MCM10	926	568	741	453	540	599	minichromosome maintenance complex component 10
TMEM184A	631	584	607	569	568	599	transmembrane protein 184A
ITSN2	655	588	622	670	574	599	intersectin 1 (SH3 domain protein)
B3GNT1							
	848	597	695	482	587	598	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 1
MSH4	513	529	571	501	492	598	mutS homolog 4
BFAR	655	548	665	528	635	598	bifunctional apoptosis regulator
HIF1A	714	532	704	599	615	598	HIF1 domain containing
ATAD5	810	560	746	507	555	597	ATPase family, AAA domain containing 5
CWC27							
	540	542	638	504	433	596	CWC25 spliceosome-associated protein homolog (S. cerevisiae)

LOC104913559	654	644	669	585	588	596	calcineurin-binding protein cabin-1-like
UXS1	580	592	595	573	666	596	UDP-glucuronate decarboxylase 1
LOC104914943	567	436	599	455	499	596	cyclin-dependent kinase 7-like
PTDSS2	537	554	500	576	608	596	phosphatidylserine synthase 2
UST	668	635	721	628	623	595	uronyl-2-sulfotransferase
KHDRBS3	765	576	727	565	636	595	KH domain containing, RNA binding, signal transduction associated 1
STK38L	603	436	634	490	619	595	serine/threonine kinase 38 like
ARFIP2	732	630	657	563	562	595	ADP-ribosylation factor interacting protein 2
CNOT10	697	565	666	564	587	594	CCR4-NOT transcription complex, subunit 1
LOC104915341	626	526	638	538	557	594	transcription factor TFIIIB component B'' homolog
LOC104915130	588	1276	576	483	267	594	leucine-rich repeat-containing protein 2
MTMR10	654	597	630	664	641	594	myotubularin related protein 10
RECK	689	581	695	561	600	593	reversion-inducing-cysteine-rich protein with kazal motifs
LOC104909266	815	1449	958	1387	1717	593	uncharacterized LOC104909266
MPV17	538	616	542	494	457	593	MpV17 mitochondrial inner membrane protein
TRIM23	456	492	534	592	432	593	tripartite motif containing 23
LOC100545814	586	518	616	521	538	593	forkhead box protein L1
OPA1	599	453	560	527	564	593	optic atrophy 1 (autosomal dominant)
ZNF518B	697	587	632	533	604	593	zinc finger protein 518B
LOC104909411	646	517	625	509	575	593	alkaline ceramidase 3-like
ARMC7	850	528	788	463	727	592	armadillo repeat containing 7
ATF6	523	567	603	550	565	592	activating transcription factor 6
NCOA1	690	629	711	592	567	592	nuclear receptor coactivator 1
LOC104916513	644	685	606	666	593	592	epsilon-sarcoglycan-like
MTERF3	604	541	620	561	559	592	mitochondrial transcription termination factor 3
LOC100542307	718	522	707	527	609	592	extracellular serine/threonine protein kinase FAM20C-like
LOC100546254	602	575	550	517	546	592	ethanolaminephosphotransferase 1-like
ANKRD2	973	1141	1120	660	679	592	ankyrin repeat domain 2 (stretch responsive muscle)
PIAS1	654	608	635	673	604	591	protein inhibitor of activated STAT, 1
LOC100541969	385	560	439	593	523	591	ubiquitin carboxyl-terminal hydrolase CYLD-like
NSMCE2	561	571	666	606	553	591	non-SMC element 2, MMS21 homolog (S. cerevisiae)
CAAP1	642	550	663	491	464	591	carbonic anhydrase VIII
DLG1	646	533	569	558	550	591	deleted in lymphocytic leukemia, 7
LOC100540451	868	494	678	449	723	591	rho GTPase-activating protein 7-like
UACA	409	529	595	473	576	591	uveal autoantigen with coiled-coil domains and ankyrin repeats
LOC100540140	686	620	680	757	643	590	enhancer of mRNA-decapping protein 4-like
NPRL3	536	518	569	546	504	590	nitrogen permease regulator-like 3 (S. cerevisiae)
LOC104909518	688	564	658	532	530	590	heterogeneous nuclear ribonucleoprotein L-like
LOC104912223	664	596	685	607	586	590	myotubularin-like
DNAJC21	636	556	660	537	572	590	DnaJ (Hsp40) homolog, subfamily C, member 2
ABLI1M3	1207	760	843	626	750	590	actin binding LIM protein family, member 3
PGM2	715	514	735	536	578	590	phosphoglucomutase 2
ZNF507	544	511	617	641	517	590	zinc finger protein 507
MED21	600	530	566	530	518	590	mediator complex subunit 21
RASL11B	636	552	640	474	554	589	RAS-like, family 11, member B
LOC104911787	705	570	702	604	723	589	integrin beta-5-like
LOC104916040	649	349	712	390	483	589	3-beta-hydroxysteroid-Delta(8),Delta(7)-isomerase-like
NXN	681	584	655	534	648	589	nucleoredoxin
TMEM128	594	487	589	495	541	589	transmembrane protein 128
ATXN3	632	579	625	638	599	589	ataxin 3
LOC104916152	656	737	513	549	677	588	solute carrier family 2, facilitated glucose transporter member 1-like
LOC104915993	650	660	589	588	613	587	ataxin-7-like protein 3
LOC104909294	705	553	666	473	747	587	hypermethylated in cancer 1 protein
MSTO1	628	589	632	521	582	587	misato 1, mitochondrial distribution and morphology regulator
UBA6	634	540	648	599	584	587	ubiquitin-like modifier activating enzyme 6
SERHL2	587	519	585	493	659	587	serine hydrolase-like 2
TRAPPC10	643	588	710	612	583	587	trafficking protein particle complex 10
MTRF1	570	531	561	562	535	587	mitochondrial translational release factor 1
PDS5B	665	484	589	587	505	587	PDS5 cohesin associated factor B
ARL6IP4	571	513	579	502	555	587	ADP-ribosylation factor-like 6 interacting protein 4
WDR48	470	480	527	563	459	587	WD repeat domain 48
LOC100544972	600	632	567	647	521	587	macrophage mannose receptor 1-like
AKT3	780	652	707	596	598	586	v-akt murine thymoma viral oncogene homolog 3
ARHGAP26	799	566	713	473	617	586	Rho GTPase activating protein 26
SCLY	611	605	539	490	467	586	selenocysteine lyase
CHAF1A	778	546	708	442	514	586	chondroadherin-like
CSGALNACT2	532	525	619	529	489	586	chondroitin sulfate N-acetylgalactosaminyltransferase 1
LOC104912895	697	625	601	560	671	586	FES proto-oncogene, tyrosine kinase
MXRA8	601	694	623	635	694	586	matrix-remodelling associated 8
SIPA1L2	639	539	680	651	558	586	signal-induced proliferation-associated 1 like 2
LZTR1	642	577	633	604	614	585	leucine-zipper-like transcription regulator 1
CDK12	869	529	772	595	666	585	cyclin-dependent kinase 10
CCND3	684	513	670	545	637	585	cyclin D2
CKS2	707	604	781	560	441	585	CDC28 protein kinase regulatory subunit 1B
LRIF1	677	563	642	598	545	585	ligand dependent nuclear receptor interacting factor 1

FAM160A2	729	714	662	611	644	585	family with sequence similarity 160, member A1
TMEM60	712	605	615	565	652	584	transmembrane protein 60
CHAC1	143	343	1262	385	303	584	cholesterol 25-hydroxylase
HEXA	645	630	633	629	713	584	HESX homeobox 1
SLC43A3	563	539	478	606	622	584	solute carrier family 43, member 3
LOC100539892	686	679	547	560	490	584	general transcription factor II-I repeat domain-containing protein 1
NIT1	483	602	509	515	554	584	nitrilase 1
ELP6	525	551	515	501	475	584	elongator acetyltransferase complex subunit 4
GSS	650	529	607	567	614	584	glutathione reductase
LRRC38	618	633	605	610	652	584	leucine rich repeat containing 38
LECT1	528	411	582	594	519	584	low density lipoprotein receptor adaptor protein 1
CCDC12	682	558	611	462	567	584	coiled-coil domain containing 117
LOC104913771	644	592	579	626	665	584	uncharacterized LOC104913771
DTWD1	768	550	755	484	552	583	dystrobrevin binding protein 1
CASP10	731	477	653	489	554	583	CASK interacting protein 2
LOC100543404	480	694	504	701	674	583	glycerophosphodiester phosphodiesterase domain-containing protein 5-like
N4BP2	551	543	561	682	614	583	NEDD4 binding protein 2
TRMT11	752	582	751	543	639	583	tRNA methyltransferase 11 homolog (S. cerevisiae)
FOXK2	582	605	564	778	539	583	forkhead box K1
LOC100545946	570	556	558	570	561	583	LON peptidase N-terminal domain and RING finger protein 3
VTI1B	503	518	493	527	524	583	vesicle transport through interaction with t-SNAREs 1B
PEX3	635	583	675	576	545	583	peroxisomal biogenesis factor 3
GCSH	672	554	674	496	573	583	glucosaminyl (N-acetyl) transferase family member 7
BTBD3	609	594	641	539	528	582	BTB (POZ) domain containing 2
PIGU	602	591	521	535	589	582	phosphatidylinositol glycan anchor biosynthesis, class U
LOC104909631	516	459	497	560	498	582	baculoviral IAP repeat-containing protein 6-like
LOC104914810	659	626	585	548	537	582	gamma-secretase subunit Aph-1b-like
THADA	500	555	577	599	501	582	thyroid adenoma associated
EPC2	575	569	577	615	549	582	enhancer of polycomb homolog 1 (Drosophila)
ERCC6L	984	527	797	486	539	582	excision repair cross-complementation group 5
MLLT4	773	614	741	571	568	582	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 4
FAM20C	792	587	834	566	715	582	family with sequence similarity 20, member B
SNRNP27	665	586	548	523	527	581	small nuclear ribonucleoprotein 27kDa (U4/U6.U5)
LOC104913877	519	525	488	490	528	581	uncharacterized LOC104913877
VPS26A	704	623	703	604	589	581	vacuolar protein sorting 26 homolog A (S. pombe)
SLC35F5	763	575	740	573	615	581	solute carrier family 35, member F5
SSR4	727	665	643	564	519	581	signal sequence receptor, delta
ABCB6	523	620	542	672	642	581	ATP-binding cassette, sub-family B (MDR/TAP), member 6 (Langereis blood group)
INPP5B	650	534	631	589	511	580	inositol polyphosphate-5-phosphatase, 40kDa
ECH1	512	568	553	542	551	580	endothelin converting enzyme-like 1
ZDHHC17	689	539	592	543	550	580	zinc finger, DHHC-type containing 17
LOC104916071	728	414	794	633	495	580	uncharacterized LOC104916071
RCAN3	684	601	642	492	582	579	RCAN family member 3
LOC100548086	587	503	563	457	512	579	gamma-1-syntrophin
FGL2	730	790	716	799	801	579	fibrinogen-like 1
EHD4	663	569	652	496	596	579	EH domain binding protein 1
AIP	628	543	619	517	570	579	aryl hydrocarbon receptor interacting protein
WBP1	535	514	537	479	560	578	WW domain binding protein 1
TXNDC12	668	614	660	575	679	578	thioredoxin domain containing 12 (endoplasmic reticulum)
NIF3L1	564	563	599	585	493	578	NIF3 NGG1 interacting factor 3-like 1 (S. cerevisiae)
NFKB1	706	579	686	644	570	578	nuclear factor of kappa light polypeptide gene enhancer in B-cells 1
ZNF592	740	635	620	612	616	577	zinc finger protein 592
AP5Z1	548	523	555	528	552	577	adaptor-related protein complex 5, zeta 1 subunit
TRPV2	651	642	778	750	616	577	transient receptor potential cation channel, subfamily V, member 2
LEPREL2	589	629	646	521	544	577	leptin receptor
CHPF	645	733	642	541	559	577	calcineurin-like EF-hand protein 1
LOC100545581	528	462	576	540	612	577	acyl-coenzyme A thioesterase 1-like
CMC2	595	559	569	509	497	577	C-x(9)-C motif containing 1
LOC104913753	657	583	642	664	773	577	uncharacterized LOC104913753
SETD8	662	575	636	569	578	577	SET domain containing (lysine methyltransferase) 8
QSOX1	614	564	555	535	636	576	quiescin Q6 sulfhydryl oxidase 1
LOC104914928	659	489	671	402	396	575	uncharacterized LOC104914928
PQLC1	665	472	621	440	495	575	PQ loop repeat containing 1
TADA2A	628	529	601	564	569	575	transcriptional adaptor 2A
BCL9	671	579	612	671	696	575	B-cell CLL/lymphoma 9
TBL2	672	604	632	445	505	574	transducin (beta)-like 2
CAPN7	542	543	624	546	522	574	calpain 6
KAT2A	667	607	632	542	651	574	lysyl-tRNA synthetase
KIAA1919	581	540	617	607	699	574	KIAA1755 ortholog
SEMA3D	552	704	582	575	525	574	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3D

MLLT11						myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 11
FAM208B	605	516	573	432	538	574 family with sequence similarity 208, member A
DBB2	633	542	613	536	542	574 damage-specific DNA binding protein 1, 127kDa
LOC100539898	560	561	606	559	547	574 sodium- and chloride-dependent GABA transporter 2
LOC100544877	489	498	496	624	512	573 polypeptide N-acetylgalactosaminyltransferase 13
LOC100547437	583	782	554	586	539	573 protoheme IX farnesyltransferase, mitochondrial
DVL3	820	689	576	694	765	573 dishevelled segment polarity protein 1
LOC100548128	767	583	748	584	658	573 pannexin-1
MYD88	429	426	519	532	571	573 myeloid differentiation primary response 88
LOC100548938	807	562	674	529	553	573 GTP-binding protein Di-Ras2-like
STK40	685	613	611	564	618	573 serine/threonine kinase 40
SFXN1	617	534	569	551	646	573 sideroflexin 1
LH-BETA	795	501	779	491	613	572 lengsin, lens protein with glutamine synthetase domain
NOP14	459	540	429	492	778	572 NOP14 nucleolar protein
LOC100539812	718	500	651	547	536	572 focal adhesion kinase 1-like
ADAR	673	479	637	575	582	572 adenosine deaminase, RNA-specific
FOXO6	716	539	671	545	612	572 forkhead box O4
THOC3	674	504	605	345	435	572 THO complex 3
TUBGCP6	660	509	565	458	520	572 tubulin, gamma complex associated protein 6
LOC104909726	560	492	542	475	489	572 uncharacterized LOC104909726
LOC104911398	563	518	501	535	565	571 ATP-dependent 6-phosphofructokinase, platelet type-like
ALG9	824	511	695	492	596	571 ALG9, alpha-1,2-mannosyltransferase
SLC7A6	592	498	617	526	510	571 solute carrier family 7 (amino acid transporter light chain, y+L system), member 6
	516	546	521	581	498	571 G protein pathway suppressor 1
GPSM1	450	498	449	607	465	571 ATP-dependent RNA helicase DHX29-like
LOC104914890	549	482	580	604	441	571 inositol-trisphosphate 3-kinase B
ITPR1	641	538	616	494	513	571 transcription factor SOX-3-like
LOC100542860	589	615	587	534	592	571 fibrillin 3
FBRSL1	608	525	547	551	551	571 mediator complex subunit 27
MED27	623	508	645	510	604	571 TATA box binding protein (TBP)-associated factor, RNA polymerase I, B, 63kDa
TAF1B						570 alpha-aspartyl dipeptidase-like
	666	587	672	651	519	569 alanyl-tRNA synthetase 2, mitochondrial
LOC104911657	635	528	597	521	488	568 ankyrin repeat domain 28
AARS2	584	538	526	549	562	568 dnaJ homolog subfamily A member 2-like
ANKRD28	470	652	534	521	484	568 platelet-derived growth factor receptor-like
LOC100550606	684	500	661	576	545	568 uncharacterized LOC104910975
PDGFRL	626	719	717	625	624	568 solute carrier family 35 (GDP-fucose transporter), member C2
LOC104910975	669	599	679	592	580	568 mesoderm development candidate 1
SLC35C2						568 Ras-like without CAAX 1
	590	573	557	434	471	567 chromosome 19 open reading frame, human C9orf142
MESDC1	696	692	690	578	626	567 abl-interactor 1
RI1T	656	600	662	552	598	567 family with sequence similarity 135, member A
C19H9orf16	575	490	538	465	512	567 NDRG family member 4
ABI1	560	436	572	515	541	567 v-myc avian myelocytomatosis viral oncogene lung carcinoma derived homolog
FAM136A	485	507	535	406	443	567 centrosomal protein 76kDa
NDRG4	773	814	697	618	540	567 ArfGAP with coiled-coil, ankyrin repeat and PH domains 3
MYCL						567 unc-45 homolog A (C. elegans)
	867	506	871	506	610	566 39S ribosomal protein L23, mitochondrial-like
CEP78	447	500	567	473	358	566 ectonucleoside triphosphate diphosphohydrolase 8-like
ACAP3	614	495	605	483	563	566 mediator complex subunit 16
UNC45A	654	578	616	545	575	566 ubiquitin specific peptidase 46
LOC104911008	566	558	595	516	583	565 ectonucleoside triphosphate diphosphohydrolase 7
LOC100547436	522	422	503	432	473	565 chromosome 5 open reading frame, human C11orf16
MED16	680	543	644	565	643	565 N(alpha)-acetyltransferase 60, NatF catalytic subunit
USP46	508	482	545	493	627	565 interleukin-15
ENY2	519	468	500	392	391	564 tRNA-histidine guanylyltransferase 1-like (S. cerevisiae)
C5H11orf24	614	552	562	538	552	564 uncharacterized LOC104917199
NAA60	639	525	580	518	562	564 N-6 adenine-specific DNA methyltransferase 1 (putative)
LOC100303695	611	649	626	842	738	564 dystroglycan 1 (dystrophin-associated glycoprotein 1)
THG1L	605	545	617	501	549	564 interleukin-1 receptor-associated kinase 2
LOC104917199	521	713	585	698	530	563 DIS3 exosome endoribonuclease and 3'-5' exoribonuclease
NGAMT1	653	510	595	443	490	562 UDP-N-acetylglucosamine pyrophosphorylase 1
DAGLA	675	679	574	634	717	562 zinc finger and BTB domain containing 48
IRAK4	566	460	522	551	540	562 ryanodine receptor 3-like
DIS3L	688	526	600	493	592	562 phosphoinositide-3-kinase, regulatory subunit 3 (gamma)
UAP1	721	578	581	393	526	562 WD repeat-containing protein 59-like
ZBTB48	623	556	638	521	561	562 ankyrin repeat domain 32
LOC104911164	488	558	500	856	620	562 mediator complex subunit 15
PIK3R3	627	508	603	525	605	562 zinc finger, HIT-type containing 3
LOC104912993	590	610	583	537	599	562 dynein heavy chain 8, axonemal-like
ANKRD32	702	509	675	436	421	562 coagulation factor IX-like
MED15	616	495	578	498	534	562 ring finger and CCHC-type domains 2
ZNHIT3	580	476	593	544	647	562 transmembrane emp24 protein transport domain containing 7
LOC104910200	348	653	435	466	348	
LOC100549021	658	552	578	515	547	
RC3H2	707	502	666	572	678	
TMED7						

TXNDC11	604	557	578	476	551	561	thioredoxin domain containing 11
CACNA2D2							
	558	571	476	549	485	561	calcium channel, voltage-dependent, L type, alpha 1S subunit
TUBD1	677	548	625	485	529	561	tubulin, delta 1
SIRT3	543	526	534	536	481	561	sirtuin 3
IFNAR2	639	531	652	568	541	561	interferon (alpha, beta and omega) receptor 1
EMCN	718	573	667	601	672	561	ER membrane protein complex subunit 8
TPRA1	632	610	601	529	580	561	transmembrane protein, adipocyte associated 1
AP4B1	507	501	529	429	435	561	adaptor-related protein complex 4, beta 1 subunit
LOC100543188	826	552	716	631	767	561	keratin, type I cytoskeletal 13-like
SPCS2							
	706	500	587	435	537	560	signal peptidase complex subunit 2 homolog (S. cerevisiae)
FAM96A	607	520	557	473	469	560	family with sequence similarity 92, member A1
LOC100545101	613	642	566	551	526	560	1,4-alpha-glucan-branching enzyme-like
EPB41L2	517	525	560	590	584	560	erythrocyte membrane protein band 4.1-like 1
PSMG1	805	492	713	512	631	560	proteasome (prosome, macropain) assembly chaperone 1
LCMT2	649	502	524	439	487	560	leucine carboxyl methyltransferase 1
GLE1	683	550	596	493	550	559	gliomedin
LOC104911537	631	555	556	474	522	559	DENN domain-containing protein 2A-like
LSM4							
	592	516	593	467	570	559	LSM4 homolog, U6 small nuclear RNA associated (S. cerevisiae)
LOC100550063	565	535	560	590	525	559	uncharacterized LOC100550062
SAP130	760	611	667	564	548	559	Sin3A-associated protein, 130kDa
TRDMT1	548	529	596	556	508	559	tRNA aspartic acid methyltransferase 1
TEX10	686	483	619	482	537	559	testis expressed 10
LOC104909761	532	524	513	535	461	558	tubby-related protein 4-like
PBXIP1	558	648	561	596	586	558	pre-B-cell leukemia homeobox interacting protein 1
GJD2	332	388	301	623	424	558	gap junction protein, gamma 2, 47kDa
JAM2	463	541	485	559	505	558	Janus kinase and microtubule interacting protein 3
ERRF1	663	526	599	455	494	558	endoplasmic reticulum protein 44
AAMDC	403	675	512	693	638	558	adipogenesis associated, Mth938 domain containing
LOC104911910	560	584	633	508	456	558	uncharacterized LOC104911910
RASGRP3							
	485	500	595	560	444	558	RAS guanyl releasing protein 3 (calcium and DAG-regulated)
DNAJC12	370	372	434	404	388	558	DnaJ (Hsp40) homolog, subfamily C, member 11
SLC30A6	606	570	593	542	500	557	solute carrier family 30 (zinc transporter), member 6
KIAA1715	553	608	525	638	559	557	KIAA1671 ortholog
DMGDH	511	466	521	528	541	557	dystrophin
IER5	640	534	602	415	562	557	immediate early response 3 interacting protein 1
LOC100545577	538	595	566	596	538	557	extracellular calcium-sensing receptor
INF2	645	600	593	573	603	557	inner centromere protein antigens 135/155kDa
DOPEY1	589	562	568	590	576	557	downstream neighbor of SON
LOC104914210	530	460	522	557	484	557	uncharacterized LOC104914210
KMT2A	735	572	633	618	597	557	kynurenine 3-monoxygenase (kynurenine 3-hydroxylase)
LOC104914762	562	490	572	517	542	556	ubiquitin-associated protein 2
TFB1M	534	473	577	540	511	556	transcription factor B1, mitochondrial
SLC25A38	713	496	683	436	602	556	solute carrier family 25, member 38
NDUFAF5							
	540	586	576	562	578	556	NADH dehydrogenase (ubiquinone) complex I, assembly factor 5
KLHL28	622	534	592	537	608	556	kelch-like family member 26
NME3	538	522	558	485	530	556	NME/NM23 nucleoside diphosphate kinase 3
LOC100546621	643	555	554	481	480	556	gap junction beta-3 protein-like
ELOF1	671	670	612	590	566	556	ELM2 and Myb/SANT-like domain containing 1
MMP17	618	686	564	591	625	555	matrix metalloproteinase 17 (membrane-inserted)
LOC104915413	583	489	573	450	470	555	proline-rich protein 5-like
NR4A3	415	383	478	561	464	555	nuclear receptor subfamily 4, group A, member 3
ODF2	678	490	674	533	514	555	outer dense fiber of sperm tails 2
LOC104911816	436	413	521	693	647	555	glycerol-3-phosphate dehydrogenase, mitochondrial-like
LOC104910908	708	485	714	548	470	555	transforming acidic coiled-coil-containing protein 3-like
SFXN4	562	506	562	555	580	555	sideroflexin 4
LOC100541343	617	570	717	480	536	555	cytoplasmic tyrosine-protein kinase BMX-like
IFI35	657	662	545	504	580	554	interferon, gamma-inducible protein 30
MAPKAP1	623	494	623	529	603	554	mitogen-activated protein kinase associated protein 1
PDE7B	571	690	521	699	559	554	phosphodiesterase 7B
DDX28	585	515	527	456	519	554	DEAD (Asp-Glu-Ala-Asp) box helicase 24
ARSL	711	478	605	444	534	554	arylsulfatase family, member J
MCOLN1	616	537	580	528	585	554	mucolipin 1
LOC100544355	636	580	616	516	627	553	uncharacterized LOC100544354
LOC100546708	459	478	493	422	422	553	BRCA1-A complex subunit BRE
GTPBP8	491	512	569	498	629	553	GTP binding protein 6 (putative)
ANO10	469	524	527	478	479	553	anoctamin 10
ROR1	419	478	471	506	438	552	receptor tyrosine kinase-like orphan receptor 1
HNRNPAO	748	636	699	563	563	552	hepatocyte nuclear factor 4, gamma
CHMP2B	547	548	594	528	492	552	charged multivesicular body protein 2A
JOSD1	586	520	598	533	576	552	junction mediating and regulatory protein, p53 cofactor
PLCD1	653	615	601	507	494	552	phospholipase C, delta 1
LOC100550503	725	555	670	592	597	552	dedicator of cytokinesis protein 7
HEY1							hexosaminidase (glycosyl hydrolase family 20, catalytic domain)
	809	618	578	521	596	552	containing

CCRN4L	572	551	608	531	796	551	chemokine (C-C motif) receptor 9
C16H8orf33	592	519	589	482	551	551	chromosome 16 open reading frame, human C7orf62
LOC100546195	740	602	708	539	600	551	interleukin-8-like
RAPGEF3	609	746	575	564	623	551	Rap guanine nucleotide exchange factor (GEF) 3
PHF10	634	496	578	507	531	550	PHD finger protein 10
DLG5	552	491	591	545	480	550	discs, large homolog 2 (Drosophila)
GNAS							
USP40	554	564	563	514	547	550	guanine nucleotide binding protein (G protein), q polypeptide
SLC4A1AP	498	462	518	522	502	550	ubiquitin specific peptidase 40
	630	500	572	512	497	550	solute carrier family 4 (anion exchanger), member 1, adaptor protein
MMAB	548	455	530	445	456	550	methylmalonic aciduria (cobalamin deficiency) cblB type
RNF11	616	547	604	534	555	550	ring finger protein 11
ERMP1	624	455	531	476	501	550	ermin, ERM-like protein
YPEL5	504	516	533	667	531	549	yippee-like 5 (Drosophila)
CLOCK	564	558	602	585	629	549	chloride channel, nucleotide-sensitive, 1A
TMEM132A	612	585	529	542	555	549	transmembrane protein 132A
LOC104909775	626	462	614	447	513	549	uncharacterized LOC104909775
CDPF1	568	530	550	476	536	549	cell adhesion associated, oncogene regulated
MIER2	611	545	578	496	571	549	mesoderm induction early response 1, family member 2
RAVER2	555	503	568	494	512	549	ribonucleoprotein, PTB-binding 2
LOC100541666	705	483	647	455	559	549	F-box only protein 15-like
F2R	742	519	774	540	557	549	coagulation factor II (thrombin)
LOC100548521	732	468	645	460	476	549	gametocyte-specific factor 1-like
SLC25A25							solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 25
C3H18orf21	602	451	644	415	487	548	complement component 3a receptor 1
ATP13A3	694	522	636	570	540	548	ATPase type 13A3
ATXN7	472	532	500	542	518	547	ataxin 7
LOC100540846	570	375	593	426	473	547	electrogenic sodium bicarbonate cotransporter 1-like
GARNL3	620	513	560	557	530	547	GRB2 associated, regulator of MAPK1-like
PGLS	604	492	549	504	511	547	6-phosphogluconolactonase
LOC100539753	1157	459	827	630	1007	547	protocadherin Fat 4-like
LOC104909672	467	463	449	592	454	547	baculoviral IAP repeat-containing protein 6-like
LOC104910533	297	447	384	563	343	547	uncharacterized LOC104910533
UFC1	511	449	534	410	475	547	ubiquitin-fold modifier conjugating enzyme 1
PIK3CD							
	591	556	598	547	560	547	phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit delta
WLS	682	473	610	583	595	546	wntless Wnt ligand secretion mediator
ARNTL	601	529	570	598	477	546	aryl hydrocarbon receptor nuclear translocator-like
RPS19BP1	659	642	667	577	590	546	ribosomal protein S19 binding protein 1
CENPN	699	506	642	489	508	546	centromere protein M
SMARCAD1							
	569	497	569	452	453	545	SWI/SNF-related, matrix-associated actin-dependent regulator of chromatin, subfamily a, containing DEAD/H box 1
STXBP5	680	532	677	552	612	545	syntaxin binding protein 5 (tomosyn)
ZFYVE9	633	501	578	617	544	545	zinc finger, FYVE domain containing 9
TPST2	441	577	509	529	550	545	tyrosylprotein sulfotransferase 2
LOC100540906	612	641	588	638	473	545	fibroblast growth factor receptor 2
LOC100545415	579	541	579	543	583	544	rho GTPase-activating protein 42
TCAP	661	995	532	796	565	544	titin-cap
RYK	567	566	563	536	500	543	receptor-like tyrosine kinase
NAA40	638	481	567	433	561	543	N(alpha)-acetyltransferase 40, NatD catalytic subunit
PSMG3	468	509	539	455	485	543	proteasome (prosome, macropain) assembly chaperone 3
LOC104909231	588	509	581	477	566	543	uncharacterized LOC104909231
LOC100550081	549	440	529	471	524	542	DNA helicase MCM9
LIPT1	615	484	546	474	555	542	lipase, member I
RANBP10	622	586	613	581	576	542	RAN binding protein 10
MAD2L2	673	508	580	444	566	542	MAD2 mitotic arrest deficient-like 2 (yeast)
NCAPH2	770	534	658	417	443	542	non-SMC condensin II complex, subunit H2
BCAR3	598	608	598	523	486	541	breast cancer anti-estrogen resistance 3
DNAL1	512	509	580	549	504	541	DnaJ (Hsp40) homolog, subfamily C, member 9
FANCM	631	556	584	563	528	541	Fanconi anemia, complementation group L
LAMP5	607	427	563	357	448	541	lysosomal-associated membrane protein 3
CDC6	838	492	643	359	472	540	cell division cycle 45
CEP68	616	619	607	621	571	540	centrosomal protein 57kDa-like 1
PTRH2	603	496	560	429	489	540	peptidyl-tRNA hydrolase 2
LOC100540318	643	537	637	540	451	540	rho guanine nucleotide exchange factor 39-like
CPE	615	611	652	544	566	539	carboxypeptidase D
ABCD4	394	472	381	510	408	539	ATP-binding cassette, sub-family D (ALD), member 4
TAB1	589	525	571	493	548	539	TGF-beta activated kinase 1/MAP3K7 binding protein 1
TRMT10A	585	480	524	559	532	538	tRNA methyltransferase 10 homolog A (S. cerevisiae)
MYCBPAP	462	422	396	350	413	538	MYCBP associated protein
LOC104910335	638	562	531	547	534	538	DNA-dependent protein kinase catalytic subunit-like
GTF2H5	627	559	686	550	665	538	general transcription factor IIF, polypeptide 3, 34kDa
LOC104913121	489	564	481	492	527	538	E3 ubiquitin-protein ligase RNF123-like
CCDC126	699	465	704	424	519	537	coiled-coil domain containing 125
VSTM4	730	360	558	389	501	537	V-set and transmembrane domain containing 4
LOC104909595	578	532	487	464	557	537	uncharacterized LOC104909595

BRCC3	608	568	575	509	528	537	breast cancer 2, early onset
ALKBH1	505	487	536	436	514	537	alkB, alkylation repair homolog 1 (E. coli)
SYT15	417	612	418	571	383	537	synaptotagmin XV
LOC104916041	612	611	565	495	574	536	immediate early response gene 5-like protein
TAMM41							TAM41, mitochondrial translocator assembly and maintenance protein, homolog (S. cerevisiae)
LOC100538587	550	445	504	499	460	536	phosphatidylinositol-binding clathrin assembly protein
POLR2J	955	356	917	616	1153	536	
	611	485	503	424	468	536	polymerase (RNA) II (DNA directed) polypeptide J, 13.3kDa
MCM8	640	501	639	454	505	535	minichromosome maintenance complex component 8
PI4K2A	604	578	604	493	577	535	phosphatidylinositol 4-kinase type 2 alpha
ABCB10							
	562	538	500	530	489	535	ATP-binding cassette, sub-family B (MDR/TAP), member 10
COL19A1	414	940	479	466	280	535	collagen, type XVIII, alpha 1
NCALD	783	511	663	544	649	535	neurocalcin delta
NUDT14							
	375	504	448	509	557	535	nudix (nucleoside diphosphate linked moiety X)-type motif 14
KIAA1107	1063	516	921	476	736	535	KIAA1045 ortholog
MXRA7	600	430	607	472	533	535	matrix-remodelling associated 7
FBXO28	558	546	541	461	570	534	F-box protein 25
LOC100538455							
	706	562	599	455	516	534	potassium voltage-gated channel subfamily V member 2-like
MGAT2							mannosyl (alpha-1,6-)-glycoprotein beta-1,2-N-
	664	513	591	431	530	534	acetylglucosaminyltransferase
FIP1L1	635	449	588	520	530	534	filamin A interacting protein 1-like
TBC1D2	348	588	394	533	309	534	TBC1 domain family, member 2
KBTBD4	492	515	514	487	482	534	kelch repeat and BTB (POZ) domain containing 3
ING4	566	506	485	444	515	533	inhibitor of growth family, member 3
RNF103	424	524	464	531	627	533	ring finger protein 103
BLOC1S2	540	459	510	459	438	533	biogenesis of lysosomal organelles complex-1, subunit 2
LOC100550829	503	456	524	418	468	533	chromosome unknown open reading frame, human C12orf10
LOC104909322	582	1315	711	1339	1202	533	elastin-like
LOC104910773	468	502	482	441	451	532	uncharacterized LOC104910773
TMEM126A	577	515	600	490	558	532	transmembrane protein 126A
SPATA5	639	496	595	459	535	532	spermatogenesis associated 5
NCSTN	554	545	588	549	523	532	nicastrin
DISP1	557	629	600	600	517	532	disrupted in schizophrenia 1
LOC100542484	758	445	643	451	523	532	cytosolic phospholipase A2 epsilon-like
SLC8A3							
	428	412	361	523	394	532	solute carrier family 8 (sodium/calcium exchanger), member 3
ING3	506	443	567	524	481	532	inhibitor of growth family, member 2
ZCCHC10	643	480	635	464	517	531	zinc finger, CCHC domain containing 10
CMAS	588	494	534	435	459	531	citrate lyase beta like
SYAP1	537	517	524	493	491	531	synapse associated protein 1
UBXN6	611	479	608	505	514	531	UBX domain protein 6
ARID5B	533	554	508	655	558	531	AT rich interactive domain 5B (MRF1-like)
PPAP2A	441	443	558	526	410	531	phosphatidic acid phosphatase type 2A
LOC104913961	552	480	514	407	437	531	vacuole membrane protein 1-like
LOC100545069	604	501	571	577	570	531	laminin subunit alpha-2
LOC104912573	629	515	606	604	525	531	cullin-3-B-like
EXOSC7	660	561	600	480	493	531	exosome component 4
CLCN6	431	460	504	508	411	531	chloride channel, voltage-sensitive 5
LOC104912782	670	591	637	515	618	531	fanconi-associated nuclease 1-like
SMC6	626	482	602	488	480	530	structural maintenance of chromosomes 6
PMS2	705	538	681	500	629	530	PMS2 postmeiotic segregation increased 2 (S. cerevisiae)
SURF1	447	466	437	465	439	530	surfeit 1
COIL	705	517	607	522	504	530	component of oligomeric golgi complex 8
METTL22	512	495	507	557	644	530	methyltransferase like 22
APAF1	592	464	559	483	494	530	apoptotic peptidase activating factor 1
C1H12orf66	614	507	538	444	589	530	chromosome 1 open reading frame, human C12orf57
TRIT1	557	522	587	573	583	530	tRNA isopentenyltransferase 1
MRPL19	596	443	654	448	472	529	mitochondrial ribosomal protein L19
CDC37	679	547	596	468	550	529	cell division cycle 34
GUK1	708	482	601	561	573	529	GUF1 GTPase homolog (S. cerevisiae)
UNG	651	576	613	455	443	529	uracil-DNA glycosylase
LOC100547916	655	567	628	556	599	529	heat shock protein 30C-like
UBE2E3	529	513	551	510	484	529	ubiquitin-conjugating enzyme E2E 3
TIRAP							
	471	472	465	465	467	529	toll-interleukin 1 receptor (TIR) domain containing adaptor protein
IMMP1L							
	588	521	557	474	495	529	integrin-linked kinase-associated serine/threonine phosphatase
TTC21B	504	503	498	535	441	529	tetratricopeptide repeat domain 21B
LOC104914746	461	500	526	401	346	529	uncharacterized LOC104914746
TEX264	579	586	554	527	476	529	testis expressed 264
CNPY3	584	550	544	506	497	529	cyclin Pas1/PHO80 domain containing 1
NUF2	599	455	618	435	407	529	NUF2, NDC80 kinetochore complex component
YEATS4	593	484	569	385	456	528	YEATS domain containing 4
HJURP							
	658	457	635	487	443	528	human immunodeficiency virus type I enhancer binding protein 3

WDR59	588	496	526	617	554	528	WD repeat domain 59
FAM76A	545	536	547	546	519	528	family with sequence similarity 73, member B
STX12	528	419	563	504	511	528	syntaxin 12
ADORA2B	548	351	573	405	524	528	adenosine A2b receptor
C15H5orf45	591	653	741	459	513	528	chromosome 15 open reading frame, human C5orf24
TRMT10B	479	455	503	463	410	527	tRNA methyltransferase 10 homolog B (S. cerevisiae)
ZC3H12A	599	565	543	584	588	527	zinc finger CCH-type containing 12A
APH1A	526	602	517	597	506	527	APH1A gamma secretase subunit
ATG14	439	453	486	595	480	527	autophagy related 14
E2F6	480	529	514	501	479	527	E2F transcription factor 5, p130-binding
SF3A2	644	454	576	458	499	526	splicing factor 3a, subunit 2, 66kDa
UBE2J1	493	486	549	439	513	526	ubiquitin-conjugating enzyme E2, J1
FBXO42	585	545	522	496	515	526	F-box protein 41
MPDZ	472	449	491	503	403	526	multiple PDZ domain protein
LOC100545675	646	529	592	512	524	526	aldose reductase-like
POLG	638	477	599	446	530	526	polymerase (DNA directed), gamma
RPS6KA1	721	506	677	503	553	526	ribosomal protein S6 kinase, 90kDa, polypeptide 1
CETN2	660	566	562	518	557	526	ceramide synthase 6
HPS3	467	438	469	552	413	526	Hermansky-Pudlak syndrome 1
EPHB2	668	511	620	517	552	526	EPH receptor B1
POMT1	535	486	547	494	475	525	protein-O-mannosyltransferase 1
UBE2E1	704	513	689	540	587	525	ubiquitin-conjugating enzyme E2E 1
MAP2K3	494	509	532	539	558	525	mitogen-activated protein kinase kinase 3
LOC104916918	571	553	483	469	494	525	NAD(P)H-hydrate epimerase-like
C13H16orf70	490	555	580	643	508	525	chromosome 12 open reading frame, human C15orf65
TGS1	623	506	571	518	538	525	trimethylguanosine synthase 1
PDZD2	553	588	528	597	478	525	PDZ domain containing 2
NOM1	553	451	444	401	473	525	nucleolar protein with MIF4G domain 1
SH2D3C	525	505	540	477	565	524	SH2 domain containing 3C
LOC100549522	604	497	576	535	546	524	fatty acid desaturase 1-like
SNEED1	641	449	604	548	638	524	sushi, nidogen and EGF-like domains 1
LOC104917302	508	652	474	486	364	524	forkhead box protein D3
LRRC15	620	528	620	431	492	524	leucine rich repeat containing 15
LOC104916865	464	424	569	416	396	524	hydroxysteroid dehydrogenase-like protein 2
DCHS1	694	531	633	488	558	524	doublecortin domain containing 2B
NHP2	634	556	567	444	490	524	NHP2 ribonucleoprotein
LSM6							
	627	516	601	405	447	524	LSM6 homolog, U6 small nuclear RNA associated (S. cerevisiae)
NIPA1	535	378	529	460	530	524	non imprinted in Prader-Willi/Angelman syndrome 1
LOC104916895	311	627	318	453	391	524	glutaryl-CoA dehydrogenase, mitochondrial-like
LOC104911118	543	419	545	404	511	523	exostosin-2-like
LOC104913940	552	484	548	493	511	523	uncharacterized LOC104913940
LOC104912469	497	457	495	454	515	523	vasculin-like protein 1
LOC104909373	670	494	580	425	483	523	centrosomal protein KIAA1731-like
LOC104910038	638	530	619	523	528	522	uncharacterized LOC104910038
ZGRF1	646	454	618	418	472	522	zinc finger, GRF-type containing 1
EXTL2	388	467	492	417	393	522	exostosin-like glycosyltransferase 1
FZD1	558	488	540	477	558	522	forty-two-three domain containing 1
LIN52	516	411	507	473	494	521	lin-28 homolog B (C. elegans)
STK11	461	538	523	521	504	521	serine/threonine kinase 11
LOC100547495	863	574	712	551	575	521	E3 ubiquitin-protein ligase NEDD4
KDSR	708	489	592	469	522	521	lysine (K)-specific demethylase 8
SLC38A1	563	434	610	458	431	521	solute carrier family 38, member 1
FIBIN	536	751	763	412	507	521	fibrinogen C domain containing 1
PIK3CA							
	617	518	610	610	528	521	phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit alpha
PDCD7	618	568	557	488	490	521	programmed cell death 7
SIRT6	621	520	600	532	572	521	sirtuin 6
LOC104909873	459	498	613	724	607	521	uncharacterized LOC104909873
LOC100548332							tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation
	594	488	530	426	545	520	protein theta
LOC104913936	473	365	440	551	563	520	uncharacterized LOC104913936
MGST3	639	515	543	468	497	520	microsomal glutathione S-transferase 3
TIPARP	551	547	483	564	511	520	TCDD-inducible poly(ADP-ribose) polymerase
LOC104911001	527	529	541	486	503	520	RNA polymerase-associated protein CTR9 homolog
ITPA	624	582	463	531	458	520	integral membrane protein 2C
LOC104917517	790	482	646	462	568	519	retinoblastoma-associated protein-like
DYNLT1	647	460	576	472	543	519	dynein, light chain, roadblock-type 2
NGFR	758	437	668	370	469	519	nerve growth factor receptor
TM2D3	604	519	562	480	459	519	TM2 domain containing 3
NUFIP2							
	546	456	559	455	559	519	nuclear fragile X mental retardation protein interacting protein 2
RAD18	702	495	589	411	458	519	RAD18 E3 ubiquitin protein ligase
GEMIN5	651	467	594	551	555	519	gem (nuclear organelle) associated protein 4
SPATS2	624	494	557	546	556	519	spermatogenesis associated, serine-rich 2
DENND4C	489	603	587	651	494	518	DENN/MADD domain containing 4A
PUS3	633	459	522	420	509	518	pseudouridylate synthase 3
LOC104913570	608	542	556	526	526	518	thyroid adenoma-associated protein homolog
LOC104912329	608	491	529	395	491	518	uncharacterized LOC104912329

TMC6	632	576	588	633	623	518	transmembrane channel-like 6
MMP23B	512	490	554	462	441	518	matrix metalloproteinase 23B
STX8	574	532	500	513	507	517	syntaxin 8
PYGL	695	618	696	617	629	517	phosphorylase, glycogen, liver
SEC22C							
	443	388	460	455	662	517	SEC22 vesicle trafficking protein homolog C (S. cerevisiae)
GSE1	689	581	617	605	594	517	goosecoid homeobox 2
FANCD2	795	474	668	433	486	517	Fanconi anemia, complementation group C
SLC12A4							
	601	506	518	559	492	517	solute carrier family 12 (potassium/chloride transporter), member 4
SYNPO	637	595	592	550	566	517	synaptopodin
RFTN2	475	504	532	493	481	517	raftlin family member 2
NHLRC1	500	513	497	512	576	516	NHL repeat containing E3 ubiquitin protein ligase 1
BCHE	572	480	584	541	531	516	butyrylcholinesterase
PPFIBP2	459	521	481	552	423	516	PTPRF interacting protein, binding protein 2 (liprin beta 2)
ARID5A	546	632	541	633	498	516	AT rich interactive domain 5A (MRF1-like)
PTTG1IP	573	595	554	480	411	515	pituitary tumor-transforming 1 interacting protein
BRPF1	625	501	571	524	494	515	BRO1 domain and CAAX motif containing
NEK7	507	495	534	469	471	515	NIMA-related kinase 7
SRPK1	606	487	538	539	553	515	SRSF protein kinase 1
DENN2A	679	531	596	546	582	515	DENN/MADD domain containing 1B
RSRC1	495	548	519	512	452	515	arginine/serine-rich coiled-coil 1
TNFRSF11A							
	626	607	622	583	633	514	tumor necrosis factor receptor superfamily, member 11a, NFkB activator
GUCY1A3	611	483	608	513	519	514	guanylyl cyclase domain containing 1
PARVA	553	474	540	520	479	514	parvin, alpha
DNAJC5	624	496	579	466	535	514	DnaJ (Hsp40) homolog, subfamily C, member 3
GUF1	613	487	645	502	674	514	guanylate cyclase 2F, retinal
LOC100543133	610	539	593	558	744	514	histone H3-like
LOC104914155	479	540	536	453	442	514	uncharacterized LOC104914155
COMMD9	538	495	489	456	437	514	COMM domain containing 8
PHC1	612	494	591	476	483	513	polyhomeotic homolog 1 (Drosophila)
LOC104912186	554	570	574	587	599	513	mitochondrial fission factor homolog B-like
CLN6	650	560	562	514	499	513	ceroid-lipofuscinosis, neuronal 5
TYRO3	717	560	618	509	589	513	TYRO3 protein tyrosine kinase
RPP30	593	468	618	492	552	513	ribonuclease P/MRP 30kDa subunit
LOC104912498	527	470	522	491	492	512	terminal uridylyltransferase 4-like
FBXL21	554	516	551	512	475	512	F-box and leucine-rich repeat protein 20
PPP1R8	556	456	518	413	463	512	protein phosphatase 1, regulatory subunit 8
LOH12CR1	552	347	464	379	440	511	loss of heterozygosity, 12, chromosomal region 1
SNX5	632	508	577	459	503	511	sorting nexin 5
CDK5RAP2	670	501	587	491	477	511	CDK5 regulatory subunit associated protein 1
LOC104913253	516	493	514	464	550	511	E3 ubiquitin-protein ligase TRIM17-like
LOC100538976	529	977	605	946	629	511	lysosome g-like
LOC100548654	477	620	477	538	607	511	ligand of Numb protein X 2-like
PPAP2C	644	547	589	446	524	511	phosphatidic acid phosphatase type 2C
PDZD11	628	507	518	383	489	510	PDZ domain containing 11
RNPC3	483	393	435	421	393	510	RNA-binding region (RNP1, RRM) containing 3
LOC104914045	520	493	566	497	526	510	nuclear receptor coactivator 3-like
LOC104913439	362	377	395	573	391	510	SUN domain-containing protein 1-like
BLM	739	484	609	406	485	510	Bloom syndrome, RecQ helicase-like
LOC100550589	536	402	501	451	491	509	tumor susceptibility gene 101 protein
IP6K2	563	568	561	597	474	509	inositol hexakisphosphate kinase 1
LOC104916528	620	473	554	447	474	509	histone H1x
BRD9	487	487	469	502	417	509	bromodomain containing 8
HIVEP1	592	552	572	623	637	509	homeodomain interacting protein kinase 3
TLDC1	518	392	506	398	390	509	TBC/LysM-associated domain containing 1
NCDN	589	457	519	435	478	509	neurochondrin
CHSY1							
	736	544	632	428	520	509	carbohydrate (N-acetylglucosamine 4-O) sulfotransferase 9
MKI67	665	401	645	494	427	509	marker of proliferation Ki-67
ETV6	660	539	610	502	523	509	ets variant 4
CUTC	480	513	482	441	477	508	cutA divalent cation tolerance homolog (E. coli)
LOC100539278	485	472	516	549	435	508	chromodomain-helicase-DNA-binding protein 1-like
LOC104910196	562	441	479	362	432	508	testis-expressed sequence 10 protein homolog
ST7L	564	525	544	507	522	508	suppression of tumorigenicity 7 like
CBR4	424	416	399	396	331	508	carbonyl reductase 1
EAPP	591	603	568	519	541	508	ELL associated factor 2
YRDC							
	545	404	515	344	421	508	yrDC N(6)-threonylcarbamoyltransferase domain containing
LOC104913950	340	433	380	489	424	508	uncharacterized LOC104913950
KLF10	589	568	591	507	616	508	kinesin light chain 4
PPM1E	586	448	504	429	664	508	protein phosphatase, Mg2+/Mn2+ dependent, 1E
SLC26A5	541	521	573	520	536	508	solute carrier family 26 (anion exchanger), member 5
DHX40	458	601	488	516	467	508	DEAH (Asp-Glu-Ala-His) box polypeptide 38
ZBTB17	604	551	565	547	505	508	zinc finger and BTB domain containing 17
LOC100539727	466	426	495	436	453	507	AP-4 complex subunit epsilon-1
TIMM10							
	494	574	525	477	474	507	translocase of inner mitochondrial membrane 10 homolog (yeast)

ISM2	729	432	629	537	625	507	isthmin 1, angiogenesis inhibitor
LOC104911090	606	514	565	562	506	507	MAX gene-associated protein-like
TRMT61B	506	438	489	458	430	507	tRNA methyltransferase 61B
NADK	611	440	568	492	484	507	NAD kinase
MARCH11	609	466	534	482	554	507	membrane-associated ring finger (C3HC4) 11
LOC104912141	605	536	559	504	597	506	protein Shroom4-like
GMDS	627	489	613	449	563	506	germ cell-less, spermatogenesis associated 1
UBALD1	333	712	516	766	459	506	UBA-like domain containing 1
THAP7	595	586	572	510	567	506	THAP domain containing 7
TET2	485	544	495	652	438	506	tet methylcytosine dioxygenase 2
TMEM45A	538	440	582	420	654	506	transmembrane protein 45A
LRPAP1							
	664	471	638	509	518	506	low density lipoprotein receptor-related protein associated protein 1
CCDC186	525	464	503	526	487	506	coiled-coil domain containing 183
GLB1	515	486	548	450	514	505	galactosidase, alpha
DTD2	340	489	412	474	366	505	D-tyrosyl-tRNA deacylase 1
AFAP111	567	481	506	492	535	505	actin filament associated protein 1-like 1
SYS1	485	535	489	444	447	505	Sys1 golgi trafficking protein
LOC100551231	693	720	687	398	319	505	urotensin-2 receptor-like
SMS	658	450	587	468	607	504	spermine synthase
LOC100550231	539	515	577	488	458	504	nuclear GTPase SLIP-GC-like
NRBF2	458	460	557	561	463	504	nuclear receptor binding factor 2
IGSF9	481	695	475	630	635	504	immunoglobulin superfamily, member 6
PPP1R21	613	473	549	486	496	504	protein phosphatase 1, regulatory subunit 21
RAB11FIP3	431	530	462	524	511	504	RAB11 family interacting protein 3 (class II)
CCDC58	588	510	549	451	502	503	coiled-coil domain containing 57
SLC7A1							
	527	356	685	293	470	503	solute carrier family 7 (cationic amino acid transporter, y+ system), member 1
RPP38	576	479	556	413	452	503	ribonuclease P/MRP 38kDa subunit
JARID2	422	478	458	540	480	503	junctional adhesion molecule 3
LOC104914909	485	445	555	394	331	503	uncharacterized LOC104914909
LOC104910280	484	602	522	438	544	503	receptor-type tyrosine-protein phosphatase mu-like
C2CD2L	480	465	447	445	488	502	C2 calcium-dependent domain containing 2
GID4	577	508	549	440	525	502	growth hormone secretagogue receptor
KIAA1755	547	697	450	539	460	502	KIAA1715 ortholog
LOC104914059							
	588	510	572	524	492	502	phosphatidylinositol 3,4,5-trisphosphate-dependent Rac exchanger 1
GOLGB1	622	479	592	547	515	502	protein-like
DNAJC14	690	517	613	427	518	502	golgin A7 family, member 8
MOB3A	559	485	513	456	539	502	DnaJ (Hsp40) homolog, subfamily C, member 13
TMEM256	429	495	483	472	453	501	MOB kinase activator 3A
MAPRE3	518	549	542	570	533	501	transmembrane protein 256
BET1	595	468	572	379	447	501	microtubule-associated protein, RP/EB family, member 3
SOX7	527	494	509	544	508	501	Bet1 golgi vesicular membrane trafficking protein
PISD	598	493	479	423	481	501	SRY (sex determining region Y)-box 7
TNFAIP8L1	589	467	588	457	578	501	phosphatidylserine decarboxylase
SLC25A16	522	411	470	395	421	501	tumor necrosis factor, alpha-induced protein 8-like 1
LAMTOR1	549	518	517	459	526	501	solute carrier family 25 (mitochondrial carrier), member 16
INO80C	564	451	496	431	523	501	lysosomal-associated membrane protein family, member 5
ASXL1	595	517	589	480	488	501	INO80 complex subunit 8
TMEM11	576	572	559	498	531	501	additional sex combs like transcriptional regulator 1
LOC100544738	442	430	491	427	415	501	transmembrane protein 11
IGFBP5	612	436	592	363	438	500	C-C motif chemokine 4 homolog
BAG5	581	519	537	570	480	500	insulin-like growth factor binding protein 4
LOC104911366	476	505	518	537	461	500	BCL2-associated athanogene 5
LOC104915303	580	411	640	481	354	500	uncharacterized LOC104911366
C20H17orf62	625	469	623	475	523	500	structural maintenance of chromosomes protein 2-like
DCXR	456	499	554	458	445	500	chromosome 20 open reading frame, human C17orf58
MKS1	547	512	493	399	429	500	doublecortin
LOC100547826	512	424	451	447	480	500	Meckel syndrome, type 1
LOC100545973	500	481	497	541	597	500	uncharacterized LOC100547821
TBL1XR1	505	462	505	455	447	500	ubiquitin conjugation factor E4 B
GXYLT1	619	496	558	476	473	500	transducin (beta)-like 1 X-linked receptor 1
MEF2BNB	390	456	409	430	469	500	glucuronidase, beta
LOC104912926	650	498	612	504	541	500	MEF2B neighbor
KANK1	543	539	510	521	506	499	low-density lipoprotein receptor-related protein 3-like
LOC104915124	432	465	529	501	452	499	Kallmann syndrome 1 sequence
SLC37A3	575	493	565	513	498	499	protein patched homolog 1-like
RHBD2	519	435	477	438	449	499	solute carrier family 37, member 3
FBXO34	525	616	499	576	567	499	rhomboid domain containing 2
ANKRD54	570	482	551	526	561	499	F-box protein 33
SCMH1	588	471	525	555	607	499	ankyrin repeat domain 54
LOC104916475	504	388	516	423	522	498	sex comb on midleg homolog 1 (Drosophila)
LOC104910660	558	439	550	354	459	498	nucleolar protein 16-like
LOC104912214	646	491	567	494	537	498	uncharacterized LOC104910660
ADARB1	446	502	476	494	477	498	A-kinase anchor protein 17B-like
TRAFD1	525	446	510	502	469	498	adenosine deaminase, RNA-specific, B1
LYN	562	390	563	556	517	497	TRAF-type zinc finger domain containing 1
TRIQK	590	512	544	504	538	497	LYN proto-oncogene, Src family tyrosine kinase
							triple QxxK/R motif containing

ZNF512B	752	524	592	507	568	497	zinc finger protein 512B
CASP8AP2	546	505	549	522	437	497	caspase 7, apoptosis-related cysteine peptidase
TSPAN6	591	423	544	413	532	497	tetraspanin 6
SRR	497	464	568	537	566	497	serine racemase
LOC100547219	579	455	572	447	447	497	uncharacterized LOC100547218
PPP1R13B	517	453	512	511	480	497	protein phosphatase 1, regulatory subunit 13B
GSR	586	494	534	452	482	497	G1 to S phase transition 1
RMI1	534	429	535	425	367	497	RecQ mediated genome instability 1
ESCO1	404	513	463	533	512	497	endothelial cell adhesion molecule
TRIM45	595	459	540	476	490	497	tripartite motif containing 45
LOC104914634	424	455	430	379	482	496	kelch-like protein 24
LOC104917334	593	354	575	389	455	496	MARCKS-related protein-like
TICAM1	494	414	540	446	492	496	toll-like receptor adaptor molecule 1
CHRA1	549	489	562	445	458	496	chondroitin polymerizing factor 2
MIB2	507	440	479	519	580	496	mindbomb E3 ubiquitin protein ligase 2
LOC104909688	482	383	453	368	502	496	cytochrome c oxidase assembly factor 6 homolog
ANKRD49	480	495	500	503	492	496	ankyrin repeat domain 49
JDP2	455	467	469	407	474	496	jumonji, AT rich interactive domain 2
MBIP	463	463	487	431	451	495	MAP3K12 binding inhibitory protein 1
CRB1	401	578	387	608	320	495	carnitine O-acetyltransferase
LCMT1	597	455	570	376	468	495	LCK proto-oncogene, Src family tyrosine kinase
C1H12orf29	587	471	522	498	476	495	chromosome 1 open reading frame, human C11orf97
SCAP	694	512	608	491	565	495	SREBF chaperone
LOC100542364	490	469	487	585	496	494	trifunctional purine biosynthetic protein adenosine-3-like
PXDC1	512	490	541	468	499	494	PX domain containing 1
LOC100539719	451	454	487	487	432	494	C2 calcium-dependent domain-containing protein 4C-like
ESAM	583	519	547	530	604	494	ERBB receptor feedback inhibitor 1
S100A1	474	526	491	604	564	494	S100 calcium binding protein A1
SNX25	641	545	613	536	518	494	sorting nexin 25
LOC100543957	467	447	541	450	383	494	C-C motif chemokine 3-like
ZSWIM5	526	438	486	496	465	494	zinc finger, SWIM-type containing 5
LOC104913030	501	451	414	416	430	494	protein VAC14 homolog
TWISTNB	550	467	481	415	427	494	TWIST neighbor
CEP120	483	385	477	447	378	494	centrosomal protein 104kDa
LOC100548705	477	467	481	481	490	494	radial spoke head protein 6 homolog A-like
ASNSD1	477	442	560	435	577	493	asparagine synthetase domain containing 1
STRADB	606	413	573	443	501	493	STE20-related kinase adaptor beta
SEC14L1	669	420	580	458	477	493	SEC14-like 1 (S. cerevisiae)
TMX2	530	552	497	487	575	493	thioredoxin-related transmembrane protein 2
OGFR	552	438	461	393	454	493	opioid growth factor receptor
TRAK2	449	472	410	444	493	493	trafficking protein, kinesin binding 2
FARP1	821	481	685	503	527	493	fatty acyl CoA reductase 2
HIPK1	720	448	602	532	536	493	huntingtin interacting protein 1 related
MND1	452	452	545	462	413	493	meiotic nuclear divisions 1 homolog (S. cerevisiae)
LOC100539477	519	497	528	486	490	492	CMRF35-like molecule 2
FUT4	623	637	519	577	690	492	fucosyltransferase 11 (alpha (1,3) fucosyltransferase)
MYCBP2	633	516	619	622	495	492	MYC binding protein 2, E3 ubiquitin protein ligase
LOC100539247							
UNC93B1	506	489	471	436	476	492	activating molecule in BECN1-regulated autophagy protein 1-like
LOC100541237	463	475	436	456	476	492	unc-93 homolog B1 (C. elegans)
LOC104915699	493	528	503	504	456	492	A disintegrin and metalloproteinase with thrombospondin motifs 12
SLC7A3	644	423	541	390	473	492	WD repeat-containing protein 62-like
							solute carrier family 7 (cationic amino acid transporter, y+ system), member 3
POLE2	549	438	542	301	450	492	polymerase (DNA directed), epsilon 2, accessory subunit
LOC100543914	556	461	525	396	372	491	histone H2B 1/2/3/4/6
LOC100548226	516	423	478	458	446	491	nuclear receptor ROR-beta-like
LOC100539001	488	514	461	649	529	491	methyltransferase-like protein 5 pseudogene
AP3M2	709	473	685	470	730	491	adaptor-related protein complex 3, mu 2 subunit
KXD1	496	454	518	432	436	491	kinectin 1 (kinesin receptor)
SEPT2	548	519	533	469	498	491	septin 2
DACT1	402	415	410	515	359	490	dachshund family transcription factor 2
LOC104909405	544	474	545	510	490	490	uncharacterized LOC104909405
ENC1	477	464	469	460	375	490	enabled homolog (Drosophila)
FAM175A	524	396	495	424	477	489	family with sequence similarity 173, member B
LOC100550956	517	461	542	429	418	489	uncharacterized LOC100550956
LOC100540124	481	519	493	565	483	489	myelin basic protein-like
C20H17orf70	538	400	517	417	552	489	chromosome 20 open reading frame, human C17orf67
HMOX1	577	470	514	445	530	489	hyaluronan-mediated motility receptor (RHAMM)
RNF121	594	376	476	482	1189	489	ring finger protein 121
TOLLIP	554	517	535	437	460	488	toll interacting protein
CTTNBP2	486	450	459	445	517	488	cortactin
RPL3L	487	532	572	552	586	488	ribosomal protein L3-like
CCDC28A	166	578	422	654	1181	488	coiled-coil domain containing 27
STARD3	569	440	535	428	497	488	STAR-related lipid transfer (START) domain containing 3
STK26	559	558	549	483	467	488	serine/threonine protein kinase 26
PRRG1	635	508	581	561	564	488	proline rich Gla (G-carboxyglutamic acid) 1
LOC104912084	575	454	523	487	475	488	transforming acidic coiled-coil-containing protein 2-like
	575	620	555	615	475	488	

LOC104916378	474	540	458	527	461	488	alpha-sarcoglycan-like
LOC104914185	476	429	456	462	445	488	vacuolar protein sorting-associated protein 13D-like
PHF19	646	588	596	405	394	488	PHD finger protein 19
LOC104913967	302	595	367	536	487	488	adenine phosphoribosyltransferase 1-like
ITPKB	603	498	589	496	522	488	inositol-trisphosphate 3-kinase A
ARRDC1	515	377	512	447	548	488	arrestin domain containing 1
C20H17orf80	471	475	462	462	470	488	chromosome 20 open reading frame, human C17orf75
FAM72A	617	393	574	405	474	487	family with sequence similarity 71, member D
VRK2	549	448	561	447	472	487	vaccinia related kinase 2
TMEM120B	664	476	556	403	498	487	transmembrane protein 120B
PDCD2L	470	476	456	428	454	487	programmed cell death 2-like
PCSK7	602	540	533	461	567	486	proprotein convertase subtilisin/kexin type 7
ELF1	647	517	562	492	472	486	ELAV like neuron-specific RNA binding protein 4
RNMTL1	613	459	574	444	569	486	RNA methyltransferase like 1
ZNF770	474	408	488	459	463	486	zinc finger protein 770
CMKLR1	387	444	415	527	375	485	c-Maf inducing protein
TBCE	508	438	449	447	466	485	tubulin folding cofactor E
PIGV	543	444	444	469	438	485	phosphatidylinositol glycan anchor biosynthesis, class V
CXCL14	378	209	422	334	349	485	chemokine (C-X-C motif) ligand 12
SCAI	500	457	485	488	416	485	suppressor of cancer cell invasion
ARL4A	553	456	550	479	601	485	ADP-ribosylation factor-like 4A
LOC104912943	360	435	402	625	524	485	phosphorylase b kinase regulatory subunit beta-like
URB2	554	458	497	443	495	485	URB2 ribosome biogenesis 2 homolog (S. cerevisiae)
NTPCR	534	461	535	456	449	484	nucleoside-triphosphatase, cancer-related
HAUS8	595	443	553	384	392	484	HAUS augmin-like complex, subunit 6
TRAPPC5	533	480	497	463	463	484	trafficking protein particle complex 5
TBPL1	587	461	560	459	481	484	TBP-like 1
GIN52	734	499	593	385	458	484	GIN5 complex subunit 1 (Psf1 homolog)
ADAM19	504	373	519	432	492	484	ADAM metalloproteinase domain 19
LOC104909633	560	400	519	370	444	484	tetratricopeptide repeat protein 27-like
BCR	547	401	541	430	428	483	breakpoint cluster region
TBK1	548	494	552	542	517	483	TANK-binding kinase 1
TRMT6	542	457	545	442	505	483	tRNA methyltransferase 6
LOC104914921	577	398	612	385	370	482	importin-11
FAM43A	759	463	692	456	529	482	family with sequence similarity 3, member D
LOC104911014	620	454	565	400	490	482	oxysterol-binding protein-related protein 5-like
P3H2	615	452	599	471	630	482	prolyl 3-hydroxylase 2
UVRAG	428	456	485	469	408	482	UV radiation resistance associated
DENND6A	534	433	497	461	474	482	DENN/MADD domain containing 5A
ZBTB5	496	448	524	536	452	482	zinc finger and BTB domain containing 5
RLF	471	501	510	542	465	482	rearranged L-myc fusion
LOC104912006	678	327	545	358	489	481	uncharacterized LOC104912006
LOC104915525	567	193	899	415	584	481	myosin heavy chain, skeletal muscle, adult-like
SMYD2	725	589	683	516	530	481	SET and MYND domain containing 2
TMEM200A	782	410	698	388	574	481	transmembrane protein 200A
ARHGAP10	521	503	569	508	424	481	Rho GTPase activating protein 10
FAM107B	459	341	415	322	328	481	family with sequence similarity 107, member A
ASAP3	605	564	539	461	461	481	ArfGAP with SH3 domain, ankyrin repeat and PH domain 3
PAXIP1							
	602	444	534	399	488	481	PAX interacting (with transcription-activation domain) protein 1
MED7	461	474	493	416	442	481	mediator complex subunit 7
SRD5A3	572	444	531	450	545	480	steroid 5 alpha-reductase 3
CGNL1	520	414	520	478	512	480	cingulin
AMOT	612	504	580	507	523	480	angiomin
RNF111	511	452	514	472	503	480	ring finger protein 111
KLF11	598	689	655	631	566	480	Kruppel-like factor 10
LOC104912052	371	664	458	945	336	480	nebulin-related-anchoring protein-like
GNB4							
	546	481	560	518	503	480	guanine nucleotide binding protein (G protein), beta polypeptide 3
LOC100540962	521	444	501	439	434	479	heparan sulfate glucosamine 3-O-sulfotransferase 4
D2HGDH	350	393	352	422	357	479	chromosome 2 open reading frame, human C9orf84
CLDN12	494	447	469	463	478	479	claudin 11
STRBP	403	408	421	521	578	479	spermatid perinuclear RNA binding protein
SLC35G2	522	484	507	442	578	479	solute carrier family 35, member G2
EFNB2	510	490	478	488	565	479	ephrin-A5
MTF1	496	437	467	476	486	479	metal-regulatory transcription factor 1
CFDP1	446	410	432	434	433	479	complement factor D (adipsin)
NRG4	485	470	491	441	438	478	neuregulin 4
BTBD11	472	717	542	629	421	478	BTB (POZ) domain containing 10
CAMK1	493	553	455	443	466	478	calreticulin 3
PRMT7	469	389	476	393	428	478	protein arginine methyltransferase 7
TMEM81	441	444	472	361	387	478	transmembrane protein 81
LOC100539172	445	418	444	424	411	478	chromodomain-helicase-DNA-binding protein 6
PCBD2							
	577	471	553	436	524	478	pterin-4 alpha-carbinolamine dehydratase/dimerization cofactor of
C1H3orf17	527	466	509	379	461	477	hepatocyte nuclear factor 1 alpha (TCF1) 2
CDK5RAP3	500	486	497	428	456	477	chromosome 1 open reading frame, human C2orf49
DTL	733	491	593	385	428	477	CDK5 regulatory subunit associated protein 2
LOC104915338	478	393	494	388	410	477	death domain containing 1
							uncharacterized LOC104915338

CSNK1G1	483	483	463	439	490	477	casein kinase 1, epsilon
EYA2	546	351	573	412	520	477	exostosin-like glycosyltransferase 3
LOC104909525	506	485	519	464	462	477	ribosome-binding protein 1-like
BCL2L1	548	487	529	438	556	477	BCL2-like 1
C6H7orf25	488	486	503	500	448	476	chromosome 6 open reading frame, human C1orf35
LOC100540457	371	274	492	445	391	476	melanotransferrin-like
LOC100546203	575	448	514	378	459	476	zinc finger protein 777-like
JKAMP	429	429	401	410	373	476	Jun dimerization protein 2
TMEM129	425	376	432	397	458	476	transmembrane protein 129, E3 ubiquitin protein ligase
MIER3	485	446	543	454	400	475	mesoderm induction early response 1, family member 3
TTC7B	481	423	464	498	504	475	tetratricopeptide repeat domain 7B
RAD51D	568	537	521	436	512	475	RAD51 paralog D
LOC100551374	554	419	565	371	432	475	deoxyribodipyrimidine photo-lyase-like
MGST1	598	496	578	453	487	475	microsomal glutathione S-transferase 1
LOC104914686	366	421	424	370	381	474	serine/threonine-protein kinase STK11-like
EXOC3L1	579	455	563	409	499	474	exocyst complex component 3
LOC104916939	524	423	509	427	554	474	thyroid hormone receptor alpha-like
LOC104913003	597	474	601	438	519	474	uncharacterized LOC104913003
LOC100547273	518	473	535	499	495	474	hemoglobin subunit rho
HEXB	495	427	521	400	451	474	hexosaminidase A (alpha polypeptide)
NEO1	429	529	484	526	445	474	neogenin 1
LOC104911681	345	363	326	402	430	474	tubulin polyglutamylase TTL4-like
FBXO21	469	440	431	414	439	474	F-box protein 2
ZNF395	465	471	460	500	477	474	zinc finger protein 395
EZR							
	494	425	548	375	442	474	enhancer of zeste 2 polycomb repressive complex 2 subunit
LOC104914206	682	514	583	449	522	473	polyhomeotic-like protein 2
LOC100539382	588	499	500	566	479	473	avidin-related protein 1-like
ZDHHC16	591	510	459	470	555	473	zinc finger, DHHC-type containing 16
RPS6KA5	428	482	467	506	388	473	ribosomal protein S6 kinase, 90kDa, polypeptide 5
LOC100544485	849	599	786	562	1260	473	trypsin II-P29-like
NOD1	562	456	525	420	425	473	nucleotide-binding oligomerization domain containing 1
LOC100548105	497	429	447	427	517	473	cytochrome b-c1 complex subunit 6, mitochondrial
LOC104913033	778	473	665	512	604	473	breast cancer anti-estrogen resistance protein 1-like
LOC100540017	472	383	504	423	413	472	uncharacterized LOC100540009
ZNF608	266	251	398	354	304	472	zinc finger protein 608
SPOCK2							
	453	527	410	413	357	472	sparc/osteonectin, cwcv and kazal-like domains proteoglycan (testican) 2
LOC100546992	549	408	548	373	481	472	fructose-1,6-bisphosphatase 1
LOC104912362	465	454	520	468	416	472	metal-response element-binding transcription factor 2-like
LOC100543336	403	479	450	403	436	472	myosin heavy chain, skeletal muscle-like
VP554	474	417	501	399	415	471	vacuolar protein sorting 54 homolog (S. cerevisiae)
LOC104911133	441	481	515	499	467	471	uncharacterized LOC104911133
LOC100548407	687	460	568	430	396	471	kinesin-like protein KIF6
LOC100543235	487	427	520	395	472	471	protein FAM65C-like
LOC100545817	427	527	397	494	417	471	microtubule-associated protein 1B
COQ4	543	530	482	454	518	471	coenzyme Q3 methyltransferase
LOC100543301	501	350	539	351	434	471	desmocollin-2
GPR133	469	444	462	553	521	471	G protein-coupled receptor 132
GJA5	517	452	514	419	612	471	gap junction protein, alpha 4, 37kDa
NOP9	365	342	318	295	345	471	NOP9 nucleolar protein
RNF185	545	507	561	447	537	470	ring finger protein 185
PTGES	400	626	506	416	455	470	prostaglandin E synthase
ACSS1	483	474	500	455	398	470	acyl-CoA synthetase short-chain family member 1
B4GALT7							
	528	535	476	365	405	470	xylosylprotein beta 1,4-galactosyltransferase, polypeptide 7
ST8SIA6							
	435	371	460	450	368	469	ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 6
AMOTL1	386	568	483	589	401	469	angiomotin like 1
STON2	392	457	476	461	480	469	stonin 2
LGALS8	632	483	575	450	569	469	lectin, galactoside-binding, soluble, 3
SH2D2A	482	443	461	363	410	469	SH2 domain containing 2A
ZNF687	471	393	460	407	417	469	zinc finger protein 687
LOC100543969	510	890	690	449	554	469	TFIIA-alpha and beta-like factor
GBA2	539	419	567	409	486	469	GATS protein-like 3
LOC100545338	251	367	192	495	295	469	sulfotransferase family cytosolic 2B member 1-like
IAH1	540	426	347	402	233	468	huntingtin interacting protein K
SLC35F6	655	490	583	428	522	468	solute carrier family 35, member F6
TMEM98	456	528	446	462	421	468	transmembrane protein 98
FAM217B	397	406	398	454	532	468	family with sequence similarity 214, member B
CPEB3	356	411	440	460	440	468	cytoplasmic polyadenylation element binding protein 2
BAG4	588	412	532	432	471	468	BCL2-associated athanogene 4
LOC100539550	516	578	570	546	469	468	alpha-2-macroglobulin-like protein 1
LOC104916841	560	452	514	431	463	468	RAC-beta serine/threonine-protein kinase-like
CSPP1	498	458	484	430	425	467	chondroitin sulfate proteoglycan 5 (neuroglycan C)
LOC104917534	405	331	380	308	345	467	mitochondrial intermediate peptidase-like
LOC104917089	502	289	477	318	442	467	uncharacterized LOC104917089
ALG10	566	447	596	427	479	467	ALG10, alpha-1,2-glucosyltransferase
SCLT1	509	362	517	430	452	467	sodium channel and clathrin linker 1

PHGDH	514	320	618	241	275	467	phosphoglycerate dehydrogenase
LRP5	487	459	518	501	474	466	low density lipoprotein receptor-related protein 5
ZFAND4	535	471	506	466	448	466	zinc finger, AN1-type domain 4
FADD	581	445	536	477	498	466	fatty acid binding protein 7, brain
LOC100538779	484	435	527	468	439	466	FRAS1-related extracellular matrix protein 2-like
CZH18orf25	462	436	457	404	441	466	cysteine/tyrosine-rich 1
IGF2BP3	500	513	512	457	424	466	insulin-like growth factor 2 mRNA binding protein 2
PGPEP1	559	441	450	386	486	466	pyroglutamyl-peptidase I
SCAMP5	583	421	550	361	403	466	secretory carrier membrane protein 5
LOC104909760	509	423	500	400	453	466	transmembrane protein 181-like
RARS2	588	456	575	462	488	465	arginyl-tRNA synthetase 2, mitochondrial
LOC104911373	488	473	460	481	455	465	partitioning defective 3 homolog
STK17B	567	469	464	445	384	465	serine/threonine kinase 17b
LOC100542388							tumor necrosis factor receptor type 1-associated DEATH domain protein-like
UNKL	500	458	456	421	471	465	unkempt family zinc finger-like
PTPN4							
	539	412	522	454	468	465	protein tyrosine phosphatase, non-receptor type 4 (megakaryocyte)
KLHL5	507	453	502	460	465	464	kelch-like family member 41
LOC100547042	359	434	431	504	366	464	cytochrome P450 2W1-like
NKAIN4	651	452	634	379	435	464	Na ⁺ /K ⁺ transporting ATPase interacting 4
LOC100548902	510	386	543	494	396	464	otogelin-like
SMAP2	596	468	536	391	498	464	small ArfGAP2
CBLL1	506	420	448	418	447	464	Cbl proto-oncogene B, E3 ubiquitin protein ligase
LOC104915058	433	344	459	273	246	464	uncharacterized LOC104915058
FAM76B	524	467	501	461	473	464	family with sequence similarity 76, member A
RGP1	450	451	505	471	420	464	RGP1 retrograde golgi transport homolog (S. cerevisiae)
LOC104915526	480	864	428	487	465	463	myosin heavy chain, skeletal muscle-like
BRGX	467	434	490	429	466	463	breast cancer metastasis-suppressor 1-like
LOC100550690	340	342	366	393	345	463	kinesin-like protein KIF20A
GYPC	391	344	422	449	425	463	glycosyltransferase-like 1B
GALE	518	455	494	434	456	463	galactosylceramidase
NPAS2	367	273	411	291	324	463	neuronal PAS domain protein 2
KIF18B	636	389	552	371	430	463	kinesin family member 18A
BCAP29	499	380	489	449	470	463	B-cell receptor-associated protein 29
LOC104911902	218	456	228	550	359	463	catenin alpha-3-like
RAD54L2	583	480	552	514	483	462	RAD54-like 2 (S. cerevisiae)
CEP95	465	430	524	396	427	462	centrosomal protein 89kDa
WDR45B	540	434	498	497	503	462	WD repeat domain 45B
NDUFA7							
	495	455	478	437	401	462	NADH dehydrogenase (ubiquinone) complex I, assembly factor 7
GPX8	430	458	544	461	343	462	glutathione peroxidase 7
CTC1	453	406	421	389	396	462	chitobiase, di-N-acetyl-
LOC104915599	448	424	461	376	342	462	uncharacterized LOC104915599
PPP1R26	565	449	512	427	470	462	protein phosphatase 1, regulatory subunit 26
CDC40	555	414	455	480	415	461	cell division cycle 37-like 1
LOC104909980	579	537	581	467	515	461	uncharacterized LOC104909980
LOC104914633	622	498	557	507	537	461	retinoic acid receptor alpha
LOC104909464	910	519	784	456	492	461	reticulon-4-like
C17H12orf49	415	385	448	430	475	461	chromosome 17 open reading frame, human C12orf43
LOC104909224	886	414	732	354	552	461	heat shock protein 105 kDa-like
LOC104916149	506	435	467	432	597	461	homeobox protein SIX2-like
POT1	567	443	557	426	423	461	protection of telomeres 1
CMTR2	504	412	492	425	469	461	cap methyltransferase 1
PHHLN1	533	436	500	422	422	461	periphilin 1
MAGI1							membrane associated guanylate kinase, WW and PDZ domain containing 1
	376	368	431	395	380	460	
PDXDC1	485	412	487	447	476	460	pyridoxal-dependent decarboxylase domain containing 1
PSEN1	494	438	447	491	477	460	presenilin 1
BBS2	445	430	433	438	446	460	Bardet-Biedl syndrome 2
CLN8	522	447	511	444	530	460	ceroid-lipofuscinosis, neuronal 6, late infantile, variant
SLC25A30	401	264	343	388	559	460	solute carrier family 25, member 30
CBLB	528	395	539	416	466	460	Cbl proto-oncogene, E3 ubiquitin protein ligase
SERAC1	567	417	467	393	451	460	serine active site containing 1
TRABD	605	451	551	398	437	459	TraB domain containing
LOC100539619	537	426	533	460	492	459	tumor necrosis factor receptor superfamily member 6-like
EPHB3	648	437	582	360	518	459	EPH receptor B2
LOC100543297	641	267	563	289	459	459	zinc finger protein 239-like
LOC104916733	495	504	488	447	464	459	uncharacterized LOC104916733
NPHP4	506	406	474	416	441	458	nephronophthisis 4
LOC100539290	533	415	539	427	406	458	phosphatidate phosphatase LPIN1
LOC100547709	548	414	494	408	478	458	semaphorin-4D-like
ANGPT2	410	399	412	381	482	458	angiotensinogen 2
HES1	547	458	571	292	515	458	HERPUD family member 2
CLCN5	460	438	474	416	403	457	chloride channel, voltage-sensitive 4
LOC100539311	664	430	616	503	609	457	tumor necrosis factor receptor superfamily member 16-like
LOC104911077	512	451	476	464	447	457	uncharacterized LOC104911077
REPS1	534	412	480	440	407	457	RALBP1 associated Eps domain containing 1
TINAG	422	446	514	477	754	457	tubulointerstitial nephritis antigen

AAK1	482	390	425	476	464	457	AP2 associated kinase 1
LOC104915965	395	353	442	306	353	457	uncharacterized LOC104915965
MCF2L	469	463	462	481	496	456	MCF.2 cell line derived transforming sequence-like
PVRL3	408	439	424	437	378	456	poliovirus receptor-related 3
AHCYL1	479	450	467	404	423	456	adenosylhomocysteine-like 1
ADCY5	523	500	507	423	518	456	adenylate cyclase 5
LSM5							
	550	472	477	388	397	456	LSM5 homolog, U6 small nuclear RNA associated (S. cerevisiae)
TRAM2	576	399	554	405	470	456	translocation associated membrane protein 2
MED19	538	476	489	420	455	455	mediator complex subunit 19
TECPR1	567	563	543	517	620	455	tectonin beta-propeller repeat containing 1
LOC100550736	502	384	480	405	425	455	cyclin-C
MFSO9	399	400	389	379	427	455	major facilitator superfamily domain containing 9
ANKRD27	502	486	487	457	444	455	ankyrin repeat domain 27 (VPS9 domain)
TMEM177	502	375	517	402	387	455	transmembrane protein 177
SCUBE2	394	633	323	562	440	455	signal peptide, CUB domain, EGF-like 2
MMP28	392	436	515	529	611	455	matrix metalloproteinase 28
SEPT5	586	364	522	398	461	455	septin 5
CCBL1	379	395	377	405	478	455	cell division cycle and apoptosis regulator 1
CCDC18	412	389	386	428	359	455	coiled-coil domain containing 177
FBXO33	480	397	462	390	454	454	F-box protein 32
LOC104917197	425	367	498	416	351	454	peptidyl-prolyl cis-trans isomerase CWC27 homolog
ZDHC7	448	405	453	464	500	454	zinc finger, DHHC-type containing 7
DCTN6	537	475	488	379	434	454	dynactin 5 (p25)
C14H3orf14	443	480	443	413	374	454	chromosome 13 open reading frame, human C19orf40
RXFP1	533	478	511	407	460	454	relaxin/insulin-like family peptide receptor 1
ARSA	479	392	473	435	448	453	arylsulfatase A
SPSB3							
	367	457	403	536	449	453	splA/ryanodine receptor domain and SOCS box containing 3
FAM206A	437	430	435	403	383	453	family with sequence similarity 204, member A
PTS	500	450	499	418	472	453	6-pyruvoyltetrahydropterin synthase
DIO2	436	413	386	345	419	453	deiodinase, iodothyronine, type I
LOC104912839	375	408	404	393	358	453	uncharacterized LOC104912839
LOC104910606	431	395	479	485	475	453	protein phosphatase 1K, mitochondrial-like
VPS39	560	435	540	430	465	453	vacuolar protein sorting 39 homolog (S. cerevisiae)
ARL9	642	484	613	532	597	453	ADP-ribosylation factor-like 9
SEC63	497	382	503	474	402	453	SEC63 homolog (S. cerevisiae)
ZBTB49	459	462	464	427	417	453	zinc finger and BTB domain containing 49
ALG3	509	436	465	441	443	452	ALG3, alpha-1,3- mannosyltransferase
LOC100546538	401	421	414	448	419	452	homeobox protein Hox-B6 pseudogene
DNAJC16	501	401	479	389	466	452	DnaJ (Hsp40) homolog, subfamily C, member 15
C1S	544	411	521	421	376	452	complement component 1, r subcomponent
DIS3	476	368	437	348	370	452	disrupted in renal carcinoma 2
ZGPAT	526	484	521	432	494	452	zinc finger, CCCH-type with G patch domain
ITPRIP	497	420	509	419	403	452	inositol 1,4,5-trisphosphate receptor, type 3
LRRC57	538	410	511	423	479	452	leucine rich repeat containing 57
LOC104911762	470	489	412	514	476	451	striated muscle preferentially expressed protein kinase-like
PGGT1B	448	412	443	344	393	451	protein geranylgeranyltransferase type I, beta subunit
LOC104911796	503	445	530	463	463	451	band 4.1-like protein 5
FAM172A	477	456	463	446	331	451	family with sequence similarity 171, member B
ZNF385B	480	497	507	543	437	451	zinc finger protein 385B
PPARD	383	382	412	415	366	451	peroxisome proliferator-activated receptor delta
LOC100548193							
	536	363	486	379	417	451	galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase 1-like
GAS2L3	601	435	527	442	459	451	growth arrest-specific 2 like 2
LOC104916935	291	319	402	342	336	450	histone H1.11R-like
CMC4	503	534	428	488	490	450	C-x(9)-C motif containing 2
ETS2	492	533	525	477	480	450	v-ets avian erythroblastosis virus E26 oncogene homolog 1
PRKAA1	403	428	443	456	366	450	protein kinase, AMP-activated, alpha 1 catalytic subunit
LOC104912571	380	345	417	408	378	450	dedicator of cytokinesis protein 10-like
RARRES2	443	448	445	384	443	450	retinoic acid receptor responder (tazarotene induced) 2
LOC100550505	490	453	474	503	470	450	rho guanine nucleotide exchange factor 40-like
LOC104910980	480	406	462	536	396	450	importin-7-like
LOC104909350							
	441	409	464	569	470	450	double-stranded RNA-binding protein Staufen homolog 2-like
ARID4A	517	450	547	501	459	450	AT rich interactive domain 4A (RBP1-like)
ZDHC14	386	479	416	421	386	450	zinc finger, DHHC-type containing 14
LOC104916910	539	440	454	445	565	449	retinoic acid receptor RXR-beta-like
CSRNP1	551	554	570	497	436	449	centrosome and spindle pole associated protein 1
GUCA1B	434	400	294	457	384	449	guanylate cyclase activator 1A (retina)
CBFB							
	583	388	546	395	414	449	core-binding factor, runt domain, alpha subunit 2; translocated to, 2
ACVR2A	411	383	442	444	347	449	activin A receptor, type IIA
TRIP4	476	462	486	459	416	449	thyroid hormone receptor interactor 4
LOC100550376	369	484	387	498	445	449	uncharacterized LOC100550376
TP63	775	654	610	600	630	448	tumor protein p63
DET1	523	441	512	425	459	448	desumoylating isopeptidase 2
TBC1D31	507	428	488	390	379	448	TBC1 domain family, member 31
GCC2	529	429	495	446	470	447	GRIP and coiled-coil domain containing 1

AGO1	535	422	499	462	510	447	argonaute RISC catalytic component 1
LOC104917503	455	465	430	419	424	447	conserved oligomeric Golgi complex subunit 3-like
MON1A	584	513	535	476	506	447	MON1 secretory trafficking family member A
RGL1	514	383	493	433	458	447	ral guanine nucleotide dissociation stimulator-like 1
CHTF18	656	375	542	354	433	447	chondroitin sulfate synthase 1
PTPN9	607	516	570	444	465	447	protein tyrosine phosphatase, non-receptor type 9
CCDC127	456	436	459	436	432	447	coiled-coil domain containing 126
SKA3	625	400	551	351	385	447	spindle and kinetochore associated complex subunit 3
METTL11B	205	454	296	383	450	446	methyltransferase like 11B
LOC100546777	462	603	424	459	379	446	microtubule associated protein 4
LOC104910397	400	353	359	418	528	446	nuclear transcription factor Y subunit gamma-like
ZUFSP	454	438	471	422	426	446	zinc finger with UFM1-specific peptidase domain
CEP162	457	432	467	434	424	446	centrosomal protein 152kDa
C26H11orf57	474	482	435	461	447	446	chromosome 26 open reading frame, human C11orf52
LOC104915368	471	389	453	414	442	446	zinc finger X-chromosomal protein
NPAT	481	435	455	424	454	446	nuclear protein, ataxia-telangiectasia locus
MAGI3							membrane associated guanylate kinase, WW and PDZ domain containing 3
LOC104916409	462	401	434	405	428	446	
ABCC6	530	412	488	382	499	445	S-adenosylmethionine synthase isoform type-2
	422	361	414	398	358	445	ATP-binding cassette, sub-family C (CFTR/MRP), member 6
ZDHHC3	490	484	479	491	495	445	zinc finger, DHHC-type containing 3
GPN2	497	387	423	339	510	445	GPN-loop GTPase 1
MYOF	503	510	471	493	508	445	myoferlin
LOC100541930	549	413	463	403	436	445	cytochrome P450 2J2-like
PEAR1	575	529	535	467	424	445	platelet endothelial aggregation receptor 1
LOC104914307	489	503	528	696	389	445	uncharacterized LOC104914307
PRUNE2	892	708	782	682	450	445	prune homolog 2 (Drosophila)
LOC104917134							
	628	450	568	389	395	444	PH domain leucine-rich repeat-containing protein phosphatase 1-like
GNE	545	421	506	410	405	444	guanine nucleotide binding protein (G protein), beta 5
ZFYVE27	468	449	454	412	471	444	zinc finger, FYVE domain containing 27
WBSR22	598	479	547	419	499	444	Williams Beuren syndrome chromosome region 22
MTA3	574	397	532	435	423	444	metastasis associated 1 family, member 3
LOC104917319	411	355	348	280	303	444	forkhead box protein D3-like
THAP5	473	414	466	445	419	444	THAP domain containing 5
RAD51AP1	484	394	438	352	363	444	RAD51 associated protein 1
TNRC6B	429	415	404	498	457	444	trinucleotide repeat containing 6B
LOC104913361	404	458	377	393	322	444	uncharacterized LOC104913361
LOC100551087	532	490	468	463	375	444	ETS translocation variant 5
TET1	540	421	444	528	472	444	tet methylcytosine dioxygenase 1
LOC100545219	502	431	475	391	378	444	ATP-binding cassette sub-family D member 3-like
WARS2	450	354	433	411	360	443	tryptophanyl tRNA synthetase 2, mitochondrial
TAF8							TAF8 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 43kDa
FAM45A	387	428	417	428	395	443	family with sequence similarity 43, member B
SLC35A5	547	418	543	382	498	443	solute carrier family 35, member A5
REV1	424	384	482	405	400	443	REV1, polymerase (DNA directed)
DNAJC1	488	450	463	445	464	443	DnaJ (Hsp40) homolog, subfamily B, member 9
LOC104911291	532	481	478	424	498	443	uncharacterized LOC104911291
LOC104913334	480	607	435	455	429	443	fibroblast growth factor 1-like
ZBTB8B	470	411	435	402	342	443	zinc finger and BTB domain containing 8B
LOC100549086	567	473	536	434	470	443	proproteinase E-like
MTIF3	442	394	475	350	364	443	mitochondrial translational initiation factor 3
LACE1	386	367	372	392	369	443	laccase (multicopper oxidoreductase) domain containing 1
LOC100539943	629	489	539	508	592	443	excitatory amino acid transporter 5-like
MYBL1	513	463	576	544	433	443	v-myb avian myeloblastosis viral oncogene homolog-like 1
PLEKHH1	555	345	484	321	355	442	pleckstrin homology domain containing, family H (with MyTH4 domain)
	314	364	318	387	383	442	member 1
FSBP	488	365	492	377	451	442	frizzled-related protein
NRN1L	108	232	120	369	101	442	neuritin 1-like
ARVCF	570	419	532	504	527	442	armadillo repeat gene deleted in velocardiofacial syndrome
AS3MT	410	447	407	432	436	442	arsenite methyltransferase
NCEH1	520	521	449	527	425	442	neutral cholesterol ester hydrolase 1
CCDC88A	546	399	531	486	469	442	coiled-coil domain containing 86
CREB1	563	435	510	488	503	442	CGRP receptor component
CNST	452	461	428	428	516	442	cannabinoid receptor interacting protein 1
LOC104917412	401	492	398	394	364	442	uncharacterized LOC104917412
NOTUM	549	427	560	336	461	441	notum pectinacylesterase homolog (Drosophila)
DNMBP	445	464	464	475	410	441	dynamitin 1-like
PGF	355	413	395	464	487	441	placental growth factor
LOC100548692	469	391	508	407	449	441	L-gulonolactone oxidase-like
SLC1A4							solute carrier family 1 (glutamate/neutral amino acid transporter), member 4
F13A1	412	271	559	211	335	441	F11 receptor
CCDC174	1059	527	966	586	936	441	coiled-coil domain containing 173
LOC104913670	472	416	431	423	423	441	uncharacterized LOC104913670
LOC104909964	519	472	558	493	507	441	dystonin-like
GTSE1	297	453	317	532	437	441	GTP-binding protein 8 (putative)
	568	345	578	348	389	441	

DEAF1	486	411	459	418	464	440	DEAD (Asp-Glu-Ala-Asp) box helicase 6
TULP3	404	375	431	447	407	440	tubby like protein 3
SEPP1	431	373	414	446	447	440	selenoprotein P, plasma, 1
STAMBP	434	388	463	428	460	440	STAM binding protein
ZNF385C	376	311	343	266	311	439	zinc finger protein 385C
FPGT	457	390	440	395	368	439	folypolyglutamate synthase
ATG4B	569	433	535	414	512	439	autophagy related 4B, cysteine peptidase
MTURN							
	584	492	570	468	498	439	maturin, neural progenitor differentiation regulator homolog (Xenopus)
SUGP1	469	431	468	402	432	439	SURP and G patch domain containing 1
ZNHIT6	621	463	590	450	477	439	zinc finger, HIT-type containing 6
SAPCD2	559	382	525	327	442	439	suppressor APC domain containing 2
LOC100548583	456	322	415	476	541	438	5-hydroxytryptamine receptor 2A-like
LOC100547927	529	406	468	389	385	438	phosphofurin acidic cluster sorting protein 1-like
C10H1orf112	680	409	528	336	391	438	chromosome 10 open reading frame, human C1orf111
LOC104915350							
	446	495	417	469	353	438	methylcrotonoyl-CoA carboxylase beta chain, mitochondrial-like
LOC104915795	534	465	492	417	465	438	AT-hook DNA-binding motif-containing protein 1-like
ZNF365	513	450	485	418	432	438	zinc finger protein 365
LOC104911327	533	436	604	559	458	438	uncharacterized LOC104911327
SNX8	526	462	474	390	420	438	sorting nexin 8
SERTAD4	426	426	501	412	501	437	SERTA domain containing 4
LOC100539075	418	309	440	322	357	436	lipid phosphate phosphatase-related protein type 1
CREBL2	331	430	423	549	411	436	cAMP responsive element binding protein 5
LOC104916996							
	461	457	465	387	436	436	maestro heat-like repeat-containing protein family member 1
TMEM206	509	391	508	403	454	436	transmembrane protein 206
HLC5	474	341	432	362	416	436	hexokinase domain containing 1
WWC1	422	385	451	498	341	436	WW and C2 domain containing 1
GPX7	582	397	847	358	469	436	glutathione peroxidase 4
PITPNM2							
	480	442	445	431	436	436	phosphatidylinositol transfer protein, membrane-associated 2
PPM1D	497	432	511	482	456	436	protein phosphatase, Mg2+/Mn2+ dependent, 1D
ESM1							
	344	309	341	249	345	436	ESF1, nucleolar pre-rRNA processing protein, homolog (S. cerevisiae)
LOC104913398	518	406	463	388	391	436	uncharacterized LOC104913398
PLAC9	592	622	594	560	486	435	placenta-specific 9
LOC100549646	517	443	485	454	525	435	uncharacterized LOC100549639
ANAPC15	442	413	430	406	460	435	anaphase promoting complex subunit 15
ULK3	423	461	375	360	413	435	unc-51 like kinase 3
BSDC1	425	454	448	436	437	435	bromodomain and WD repeat domain containing 3
ARRDC4	505	504	493	382	511	435	arrestin domain containing 4
POLR2K							
	561	455	501	387	490	435	polymerase (RNA) II (DNA directed) polypeptide K, 7.0kDa
BRCA2	541	407	517	451	391	435	breast cancer 1, early onset
HDAC4	443	518	440	483	431	435	histone deacetylase 3
LOC104909451	608	486	499	407	453	435	uncharacterized LOC104909451
PKN3	582	434	528	393	466	435	protein kinase N3
PRDM4	468	457	432	463	441	435	PR domain containing 4
TOP3A	550	440	493	383	439	435	topoisomerase (DNA) III alpha
PKD2L2	331	419	363	366	306	434	polycystic kidney disease 2-like 2
DMAP1	531	427	489	398	437	434	distal-less homeobox 6
LMBR1	352	355	408	479	391	434	lectin, mannose-binding 2-like
PLAA	416	313	497	375	342	434	phospholipase A2-activating protein
LOC104915359	426	389	501	419	343	434	S-methyl-5'-thioadenosine phosphorylase-like
LOC104913833	460	414	402	325	396	433	uncharacterized LOC104913833
FAM150B	449	392	442	379	363	433	family with sequence similarity 149, member B1
CAPN10	598	420	490	433	460	433	capping protein (actin filament), gelsolin-like
LOC104914524	400	436	422	390	373	433	uncharacterized protein C3orf18 homolog
EML1	383	504	443	438	452	433	elastin microfibril interfacer 3
CNOT4	477	428	470	465	456	433	CCR4-NOT transcription complex, subunit 2
LOC100545343	657	400	546	453	498	433	parvalbumin, thymic
CCDC94	433	397	390	379	380	433	coiled-coil domain containing 93
POLR3F							
	458	429	410	401	413	433	polymerase (RNA) III (DNA directed) polypeptide F, 39 kDa
POLR2M	455	425	430	410	407	433	polymerase (RNA) II (DNA directed) polypeptide M
LOC104915807	652	467	543	353	537	432	valine--tRNA ligase, mitochondrial-like
TMEM101	426	472	429	407	394	432	transmembrane protein 101
LOC104912932	184	236	212	557	216	432	neural-cadherin-like
PIGO	445	377	404	400	463	432	phosphatidylinositol glycan anchor biosynthesis, class O
DHX8	411	366	435	369	415	432	DEXH (Asp-Glu-X-His) box polypeptide 58
ZNHIT2	386	391	354	290	329	432	zinc finger, HIT-type containing 2
LOC104911394	487	373	488	432	437	432	kinesin-1 heavy chain
TRAF1	614	423	554	382	405	432	TRAF interacting protein
GPALPP1	447	375	436	330	334	432	glycoprotein A33 (transmembrane)
TSTA3	516	469	478	410	482	432	tissue specific transplantation antigen P35B
C20H17orf89	445	478	401	387	400	432	chromosome 20 open reading frame, human C17orf80
CLCN4	337	426	385	476	507	431	chloride channel, voltage-sensitive 3
MNT	493	425	501	444	487	431	MAX network transcriptional repressor

KLC1	526	440	526	466	474	431	klotho beta
MED8	519	445	499	389	459	431	mediator complex subunit 8
C3H8orf76	470	411	498	437	408	431	chromosome 3 open reading frame, human C8orf46
PRKRIP1	537	444	482	403	480	431	PRKR interacting protein 1 (IL11 inducible)
CASP6	751	407	621	388	517	431	caspase 3, apoptosis-related cysteine peptidase
RAD1	400	364	468	346	302	430	RAD1 checkpoint DNA exonuclease
WASH1	439	426	483	448	442	430	WAS protein family homolog 1
CUEDC1	483	475	430	514	447	430	cubilin (intrinsic factor-cobalamin receptor)
TIAM2	420	344	448	403	395	430	T-cell lymphoma invasion and metastasis 2
NUDT6							
	489	459	441	361	332	430	nudix (nucleoside diphosphate linked moiety X)-type motif 6
RINT1	451	372	445	431	403	430	RAD50 interactor 1
HERPUD1							
	452	466	567	342	407	429	HECT and RLD domain containing E3 ubiquitin protein ligase 4
CELSR1	432	317	411	404	364	429	CUGBP, Elav-like family member 6
LOC100543013							CMP-N-acetylneuraminate-beta-1,4-galactoside alpha-2,3-
	438	546	463	407	414	429	sialyltransferase
SLC24A5							solute carrier family 24 (sodium/potassium/calcium exchanger), member
	467	396	431	372	392	429	5
BRCA1	577	398	546	330	373	429	BRCA1-associated ATM activator 1
IPO13	525	414	450	498	361	428	inositol polyphosphate multikinase
HES4	534	463	574	392	530	428	hes family bHLH transcription factor 1
RNPEP	577	394	499	426	440	428	arginyl aminopeptidase (aminopeptidase B)
ABHD12B	503	362	402	416	379	428	abhydrolase domain containing 12B
TPRKB	480	391	458	400	472	427	TP53RK binding protein
LARP4	609	403	497	426	479	427	La ribonucleoprotein domain family, member 1B
BBX	467	432	534	462	447	427	bobby sox homolog (Drosophila)
CELF2	442	371	419	486	427	427	CUGBP, Elav-like family member 1
MTHFR	535	482	489	435	511	427	methylenetetrahydrofolate reductase (NAD(P)H)
LZTS2	654	535	508	423	434	427	leucine zipper, putative tumor suppressor 2
ANAPC5	581	376	547	389	406	427	anaphase promoting complex subunit 5
ACBD6	450	362	439	387	383	427	acyl-CoA binding domain containing 6
ACVRL1	480	432	502	408	539	426	activin A receptor type II-like 1
ANKH	574	368	501	360	444	426	ANKH inorganic pyrophosphate transport regulator
LOC104912150	509	426	459	414	444	426	stAR-related lipid transfer protein 8-like
C19H9orf114	564	440	443	370	440	426	chromosome 19 open reading frame, human C16orf93
LOC104913580	575	388	522	426	410	426	uncharacterized LOC104913580
PTER	256	317	347	358	297	426	phosphotriesterase related
LOC100539868							
	505	356	566	423	485	426	phosphoribosylaminoimidazole carboxylase and
OPTC	531	548	502	473	454	426	phosphoribosylaminoimidazolesuccinocarboxamide synthase
DUSP12							opticin
	410	395	432	404	434	426	dual specificity phosphatase 11 (RNA/RNP complex 1-interacting)
CASP3	475	383	489	409	381	426	caspase 2, apoptosis-related cysteine peptidase
FAM60A	699	489	588	376	425	426	family with sequence similarity 57, member A
LOC104913634	583	408	555	389	411	425	carboxy-terminal kinesin 2-like
MBD4	428	436	400	335	375	425	methyl-CpG binding domain protein 4
TFIP11	500	380	492	402	450	425	tuftelin interacting protein 11
TMEM260	549	385	507	347	407	425	transmembrane protein 260
PHF13	503	497	442	465	465	425	PHD finger protein 13
CCDC61	401	417	400	364	340	425	coiled-coil domain containing 60
BTBD7	458	464	464	456	540	425	BTB (POZ) domain containing 6
COG2	482	423	492	448	363	425	component of oligomeric golgi complex 1
DSE	449	394	474	324	363	425	Down syndrome critical region 3
POP1							
	473	370	411	335	396	424	processing of precursor 1, ribonuclease P/MRP subunit (S. cerevisiae)
RBM15B	502	416	508	407	417	424	RNA binding motif protein 15B
CSTA	494	380	418	402	362	424	cystatin F (leukocystatin)
HEATR6	521	387	512	408	459	424	HEAT repeat containing 5A
LOC100550623	434	352	483	404	358	424	mitogen-activated protein kinase kinase kinase 1
LOC100540942	596	405	554	366	481	423	teneurin-4
PIGC	345	452	360	397	342	423	phosphatidylinositol glycan anchor biosynthesis, class C
CACHD1	471	437	483	487	452	423	calcium channel flower domain containing 1
QTRTD1	561	398	465	364	390	423	queuine tRNA-ribosyltransferase domain containing 1
LOC104910482	380	421	432	364	423	423	trafficking protein particle complex subunit 9-like
SHISA4	414	542	365	425	327	423	shisa family member 4
C1H11orf30	470	392	453	371	411	423	C1GALT1-specific chaperone 1
GSTZ1	486	382	434	381	457	423	glutathione S-transferase kappa 1
SLC25A19							solute carrier family 25 (mitochondrial thiamine pyrophosphate carrier),
	562	399	515	402	519	423	member 19
BRF1	609	437	584	417	578	423	bromodomain containing 9
LOC104910747	418	398	434	356	434	422	uncharacterized LOC104910747
C1QC	492	338	461	427	466	422	complement component 1, q subcomponent binding protein
CNIH4	569	410	522	374	430	422	cornichon family AMPA receptor auxiliary protein 3
ARHGAP22	402	372	405	391	462	422	Rho GTPase activating protein 22
LIN7A	451	490	465	445	410	422	lin-54 DREAM MuvB core complex component
SMIM8	375	517	402	457	367	422	small integral membrane protein 8
MED28	507	375	461	363	434	422	mediator complex subunit 28

DNAJC19	448	387	513	375	378	422	Dnaj (Hsp40) homolog, subfamily C, member 18
ISPD	428	380	450	373	422	422	isthmin 2
NIPAL3	565	353	456	385	465	422	NIPA-like domain containing 3
MPPE1	414	391	403	409	408	422	metallophosphoesterase 1
LOC100545095	217	325	230	329	296	422	ovostatin
CANT1	496	517	465	425	432	422	cullin-associated and neddylation-dissociated 1
CPAMD8	373	452	351	439	419	422	carboxypeptidase A2 (pancreatic)
LOC104913826	430	424	407	357	412	422	uncharacterized LOC104913826
RAI2	645	469	474	388	489	422	retinoic acid induced 2
FLRT2	453	385	412	505	511	421	flotillin 2
IL18	433	462	500	445	408	421	interleukin 17 receptor E-like
VEZT	424	360	401	369	392	421	vezatin, adherens junctions transmembrane protein
GMEB2	592	462	522	443	500	421	glucocorticoid modulatory element binding protein 1
GDF1	442	396	442	383	501	421	glycerophosphodiester phosphodiesterase 1
WIPF1	424	337	417	428	342	421	WAS/WASL interacting protein family, member 1
LANCL2	453	395	461	421	415	421	LanC lantibiotic synthetase component C-like 1 (bacterial)
JAGN1	512	508	466	486	489	421	jagged 2
SIK3	412	378	363	425	379	421	SIK family kinase 3
KIF13B	457	409	455	475	474	421	kinesin family member 13A
COL4A3BP	406	437	472	422	365	421	collagen, type IV, alpha 3 (Goodpasture antigen)
CD24	699	453	573	544	658	420	CD200 receptor 1
MRPS24	488	433	461	393	447	420	mitochondrial ribosomal protein S24
PLEKHB2							
	439	366	391	336	348	420	pleckstrin homology domain containing, family B (evectins) member 2
CWC25	392	383	380	351	342	420	CWC22 spliceosome-associated protein
TMEM127	407	403	377	352	393	420	transmembrane protein 127
LOC104911581	441	377	425	399	398	419	cholinephosphotransferase 1-like
TRIM41	452	392	414	402	428	419	tripartite motif containing 41
EXOSC8	516	385	477	350	355	419	exosome component 7
MIS18BP1	534	381	524	356	392	419	MIS18 binding protein 1
LOC104913878	456	384	392	441	369	419	very large A-kinase anchor protein-like
PIKFYVE	419	473	424	606	434	419	phosphoinositide kinase, FYVE finger containing
POC1B	488	354	441	364	392	419	POC1 centriolar protein B
DAAM1	556	434	439	421	433	419	D-2-hydroxyglutarate dehydrogenase
LOC104914273	530	466	470	348	450	419	tubulin-folding cofactor B-like
LOC104912343	454	250	429	291	418	419	aspartate--tRNA ligase, mitochondrial-like
LOC104914262	507	392	446	372	385	419	nucleolar pre-ribosomal-associated protein 1-like
LOC104912550	427	324	385	342	372	419	uncharacterized LOC104912550
LOC100543828	488	359	407	439	372	419	lethal(3)malignant brain tumor-like protein 3
CSRP3	907	1282	941	638	489	419	CSRP2 binding protein
LOC104912942	330	365	347	417	437	419	T-cell immunomodulatory protein-like
LOC104917562	444	360	422	382	382	418	transcription factor SPT20 homolog
LOC100545797	454	465	476	384	405	418	uncharacterized LOC100545780
GORAB	442	473	450	386	387	418	golgi-associated PDZ and coiled-coil motif containing
LOC104911979	367	334	375	340	378	418	uncharacterized LOC104911979
NELFE	417	392	360	377	346	418	negative elongation factor complex member E
CIT	567	360	583	414	472	418	cytokine inducible SH2-containing protein
LOC104912421	526	436	462	410	467	418	dedicator of cytokinesis protein 7-like
LOC100540389	412	325	391	296	299	418	D-serine dehydratase-like
OSBPL6	310	458	298	454	421	418	oxysterol binding protein-like 6
LRRC37A3	487	446	504	388	456	417	leucine rich repeat containing 37, member A3
B4GALNT4	515	389	446	302	364	417	beta-1,4-N-acetyl-galactosaminyl transferase 4
LYST	446	435	444	465	428	417	lysosomal trafficking regulator
LOC104913731	506	824	264	665	259	417	myosin heavy chain, skeletal muscle, adult-like
LOC104911696	510	438	511	466	421	417	uncharacterized LOC104911696
DHX33	489	344	435	311	359	417	DEAH (Asp-Glu-Ala-His) box polypeptide 32
ELMOD3	442	459	475	420	438	417	ELMO/CED-12 domain containing 2
NUDT15							
	398	383	396	404	376	416	nudix (nucleoside diphosphate linked moiety X)-type motif 15
NPHP1	469	346	419	291	356	416	nephronophthisis 1 (juvenile)
TMEM138	485	460	435	419	424	416	transmembrane protein 138
LOC100543679	435	385	406	448	399	416	glycosyltransferase-like domain-containing protein 1
LOC104911797	472	374	448	352	408	416	uncharacterized LOC104911797
SUN3	261	380	319	306	257	416	Sad1 and UNC84 domain containing 3
HEXDC	425	395	428	415	382	416	hexosaminidase B (beta polypeptide)
RASSF2	459	316	401	339	458	416	Ras association (RalGDS/AF-6) domain family member 2
LOC100303663	123	646	320	859	391	416	T-cell surface glycoprotein CD8 alpha chain
TMEM170A	420	408	400	368	361	416	transmembrane protein 170A
SFXN2	485	388	419	317	335	416	sideroflexin 2
LOC100546824	511	365	475	315	338	416	2-phosphoxylese phosphatase 1
GSKIP	546	375	481	372	441	416	glycogen synthase kinase 3 beta
PWWP2B	508	396	430	436	463	416	PWWP domain containing 2B
C30H19orf44	434	375	428	352	372	415	chromosome 30 open reading frame, human C19orf35
MAP3K2	468	397	429	392	393	415	mitogen-activated protein kinase kinase kinase 2
SSH1	422	391	442	436	423	415	slingshot protein phosphatase 1
TSSC1	449	396	484	368	458	415	tumor suppressing subtransferable candidate 1
RAD51C	460	362	417	335	353	415	RAD51 paralog C
COQ10A	389	416	321	359	449	415	COP9 signalosome subunit 8
AMER1	481	419	411	429	515	415	APC membrane recruitment protein 1

SPRY1							
MED26	400	412	446	414	450	415	sprouty homolog 1, antagonist of FGF signaling (Drosophila)
TIMM13	467	427	454	407	469	415	mediator complex subunit 26
	484	565	478	425	501	414	translocase of inner mitochondrial membrane 13 homolog (yeast)
EDC3	415	390	417	428	426	414	EDAR-associated death domain
LOC104910601	439	457	403	393	384	414	latrophilin-3-like
LOC104916851	388	447	377	534	496	414	ryanodine receptor 1-like
MRPS30	467	383	481	386	310	414	mitochondrial ribosomal protein S30
LOC104913037	457	414	412	335	404	414	uncharacterized LOC104913037
LOC100548287	529	428	545	407	430	414	nucleobindin-2-like
RNF165	357	249	465	368	276	413	ring finger protein 165
LRBA							
	437	385	459	387	431	413	LPS-responsive vesicle trafficking, beach and anchor containing
ASNA1							
	508	406	464	433	390	413	arsA arsenite transporter, ATP-binding, homolog 1 (bacterial)
ARHGEF17	557	536	509	523	511	413	Rho guanine nucleotide exchange factor (GEF) 17
MYLK	480	569	535	526	562	413	myosin light chain kinase
ETV4	650	403	582	275	399	413	ets variant 1
SLC20A1	597	402	498	300	403	413	solute carrier family 20 (phosphate transporter), member 1
FBXL18	527	404	411	402	420	412	F-box and leucine-rich repeat protein 17
KIAA1467	395	396	401	408	392	412	KIAA1462 ortholog
GNA11	504	414	414	416	416	412	guanine monophosphate synthase
RAD9A	443	375	429	306	355	412	RAD9 homolog A (S. pombe)
SUPT7L	417	367	417	430	404	411	suppressor of Ty 7 (S. cerevisiae)-like
PHTF1	461	379	373	383	413	411	putative homeodomain transcription factor 1
FOPNL	393	365	418	342	303	411	farnesyltransferase, CAAX box, alpha
GPR123	410	430	396	401	392	411	G protein-coupled receptor 12
HTRA3	646	629	512	411	550	411	HtrA serine peptidase 2
PRR14L	511	449	469	517	438	411	proline rich 14-like
LOC104909410	457	380	512	401	546	411	uncharacterized LOC104909410
RAPGEF6	497	419	481	467	415	411	Rap guanine nucleotide exchange factor (GEF) 6
MKLN1	462	416	483	426	396	411	muskelin 1, intracellular mediator containing kelch motifs
LYPLAL1	308	336	286	335	314	411	lysophospholipase-like 1
LOC104917152	393	579	366	421	394	411	uncharacterized LOC104917152
MGAT1							mannosyl (alpha-1,3-)-glycoprotein beta-1,2-N-
	555	420	484	399	430	411	acetylglucosaminyltransferase
CRYBG3	392	374	397	373	368	411	crystallin, beta B3
HMCE5	542	403	505	363	512	411	hydroxymethylbilane synthase
LOC104913956	333	434	421	365	357	411	tapasin-related protein-like
TUSC2	511	437	490	413	456	411	tumor suppressor candidate 2
POF1B	378	334	338	381	381	410	premature ovarian failure, 1B
APLNR	493	340	489	352	434	410	apelin receptor
EMG1	542	396	443	358	390	410	essential meiotic structure-specific endonuclease subunit 2
FOXRED2	467	379	451	321	357	410	FAD-dependent oxidoreductase domain containing 1
ST8SIA2							
	432	311	433	310	495	410	ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 2
PLA2G6							
	349	476	392	476	393	410	phospholipase A2, group VI (cytosolic, calcium-independent)
SMIM4	440	486	451	425	387	410	small integral membrane protein 4
SRSF4	450	306	410	361	574	410	serine/arginine-rich splicing factor 4
TRAPPC12	490	450	508	460	432	409	trafficking protein particle complex 12
PLXDC2	355	535	418	496	479	409	plexin domain containing 2
CTBS	431	356	451	361	423	409	C-terminal binding protein 2
LOC104917208	319	304	385	322	316	409	uncharacterized LOC104917208
ASB8	501	406	472	364	449	409	ankyrin repeat and SOCS box containing 8
CEP57	456	360	462	363	341	409	centrosomal protein 55kDa
NPRL2	379	399	370	395	417	409	nitrogen permease regulator-like 2 (S. cerevisiae)
LOC100540379	560	438	503	493	409	409	magnesium transporter NIPA2-like
LOC104909283	542	392	453	448	340	409	lethal(3)malignant brain tumor-like protein 3
FSD1L	306	424	345	447	261	409	fibronectin type III and SPRY domain containing 1
LARP6	451	478	478	452	428	409	La ribonucleoprotein domain family, member 4B
LOC100544421	465	426	442	529	444	408	cytochrome b-245 light chain
UBN2	445	358	417	486	431	408	ubiquitin 2
LOC104910132	485	524	490	544	491	408	uncharacterized LOC104910132
WBP1L	363	312	428	462	359	408	WW domain binding protein 1-like
ZNF236	410	389	390	477	451	408	zinc finger protein 236
LOC104914959	445	338	406	325	396	408	uncharacterized LOC104914959
MAFG							
	405	380	435	455	447	408	v-maf avian musculoaponeurotic fibrosarcoma oncogene homolog G
PUSL1	389	330	425	344	395	408	pseudouridylate synthase-like 1
MMP24	410	389	423	334	374	408	matrix metalloproteinase 24 (membrane-inserted)
PGM3	422	324	372	312	373	407	phosphoglucomutase 3
FAIM	466	382	454	343	417	407	fumarylacetoacetate hydrolase domain containing 2A
ATOX8	309	254	415	367	322	407	atonal homolog 8 (Drosophila)
LOC104916215	480	383	481	374	427	407	KAT8 regulatory NSL complex subunit 2-like
SCARB1	492	425	458	411	489	407	scavenger receptor class B, member 1
FSTL3	546	520	497	355	260	407	folliculin-like 1
TMEM69	399	351	382	348	392	407	transmembrane protein 69

LOC104913028	469	354	441	284	352	406	condensin complex subunit 1-like
LOC104916435	353	301	357	397	353	406	epithelial discoidin domain-containing receptor 1-like
LOC104913556	492	346	449	399	400	406	gamma-glutamyltransferase 5-like
FRA51							fragile site, folic acid type, rare, fra(10)(q23.3) or fra(10)(q24.2)
	547	418	462	516	450	406	candidate 1
ATP13A2	465	395	418	402	398	406	ATPase type 13A2
LOC104915892	427	414	417	407	409	406	dynactin subunit 2-like
BAG1	424	400	418	338	373	405	BCL2-associated athanogene
CEP76	484	349	420	344	432	405	centrosomal protein 70kDa
MYF6	361	410	367	400	341	405	myogenic factor 6 (herculin)
LOC104910983	436	345	443	353	410	405	myotubularin-related protein 13-like
LOC104910762	374	438	349	501	414	405	microtubule-associated tumor suppressor 1 homolog
LYRM2	400	406	412	413	469	405	LYR motif containing 2
DUS2	375	360	430	390	398	405	dihydrouridine synthase 1-like (S. cerevisiae)
SLC12A7							
	424	359	393	349	383	405	solute carrier family 12 (potassium/chloride transporter), member 7
SSFA2	478	456	462	421	424	405	sperm specific antigen 2
CNGA2	451	499	439	450	464	405	cyclic nucleotide gated channel alpha 1
LOC104912511	476	416	445	426	468	404	protein SZT2-like
ZFYVE21	395	398	392	388	377	404	zinc finger, FYVE domain containing 21
LOC104910864	496	430	514	308	310	404	carboxypeptidase Z
CHD1L	502	366	448	307	354	404	coiled-coil-helix-coiled-coil-helix domain containing 7
E2F7	576	381	497	346	365	404	E2F transcription factor 6
KEAP1	574	499	500	493	495	404	3-ketodihydrosphingosine reductase
CUX1	443	429	472	439	447	404	cutC copper transporter
LOC10051442	405	595	305	471	514	404	tenascin-X-like
SOC56	397	349	413	368	416	403	suppressor of cytokine signaling 6
METTL18	483	362	376	293	463	403	methyltransferase like 18
MTERF2	274	404	319	374	349	403	mitochondrial transcription termination factor 2
LOC100546887	416	342	399	452	593	403	transmembrane protein 45B-like
CHRNA7	666	494	725	358	551	403	cholinergic receptor, nicotinic, delta (muscle)
TM2D2	412	444	380	378	385	403	TM2 domain containing 2
FKBP	419	469	372	351	391	403	FK506 binding protein 9, 63 kDa
LURAP1	404	401	402	350	436	402	leucine rich adaptor protein 1
NAGLU	445	387	381	328	380	402	N-acetylglucosaminidase, alpha
VAMP4	433	404	411	359	389	402	vesicle-associated membrane protein 4
AKAP10	455	361	444	412	398	402	A kinase (PRKA) anchor protein 10
LOC104911859	444	422	395	352	331	402	inactive dipeptidyl peptidase 10-like
INTS6	480	410	509	464	531	402	integrator complex subunit 5
LOC104909963	282	418	338	482	425	402	dystonin-like
ADCY2	336	376	325	481	279	402	adenylate cyclase 2 (brain)
KBTBD11	351	566	344	443	351	401	kazrin, periplakin interacting protein
SLIT1	324	284	325	388	304	401	slit homolog 1 (Drosophila)
LOC104909205	471	390	467	352	448	401	switch-associated protein 70
KDM1B	402	413	377	487	409	401	lysine (K)-specific demethylase 1A
SKAP2	620	399	612	430	556	400	src kinase associated phosphoprotein 2
SIMC1	500	408	460	369	455	400	SUMO-interacting motifs containing 1
TJP2	452	430	453	385	399	400	tight junction protein 2
NUBP2	422	346	381	319	417	400	nucleotide binding protein 2
YAF2	495	357	475	408	461	400	YY1 associated factor 2
CRIM1	388	398	399	424	410	400	corticotropin releasing hormone receptor 2
ITPKA	647	471	507	413	448	400	inositol-tetrakisphosphate 1-kinase
METTL13	424	329	374	309	364	399	methyltransferase like 13
ZNF865	685	424	577	396	431	399	zinc finger protein 865
SNX19	457	360	440	351	393	399	sorting nexin 19
TMEM132E	582	392	465	421	590	399	transmembrane protein 132E
RALGPS1	371	355	406	417	367	398	Ral GEF with PH domain and SH3 binding motif 1
KLF15	269	505	297	504	283	398	Kruppel-like factor 12
MUSK	439	361	436	301	325	398	muscle, skeletal, receptor tyrosine kinase
RBM48	466	368	422	315	397	398	RNA binding motif protein 48
MLH1	398	342	446	356	369	398	mutL homolog 1
SLC25A26							
	483	398	432	359	380	398	solute carrier family 25 (S-adenosylmethionine carrier), member 26
LIPG	697	298	503	218	420	398	lipase, hepatic
NHSL1	499	376	489	336	375	398	NHS-like 1
CD59							CD55 molecule, decay accelerating factor for complement (Cromer blood group)
	437	386	401	385	421	398	heat shock 27kDa protein 2
HSPB3	351	507	391	520	315	398	prolyl 4-hydroxylase, alpha polypeptide III
P4HA3	342	483	515	235	242	398	eukaryotic elongation factor 2 lysine methyltransferase
EEFSEC	394	417	412	419	367	398	regulatory factor X-associated ankyrin-containing protein
RFXANK	399	437	403	435	443	398	protein inhibitor of activated STAT, 2
PIAS2	362	334	385	337	320	397	phosphoinositide-3-kinase interacting protein 1
PIK3IP1	359	570	416	642	458	397	
PITPNM1							
	386	396	351	342	405	397	phosphatidylinositol transfer protein, membrane-associated 1
LOC104910222	333	416	345	522	474	397	myelin basic protein-like
HAUS2	446	374	448	362	345	397	HAUS augmin-like complex, subunit 1
CRLF3	512	357	442	371	412	397	cytokine receptor-like factor 2
LOC100550202	417	343	435	389	405	397	PDZ domain-containing protein 8

LOC104914533	426	368	400	320	348	397	uncharacterized LOC104914533
TDRD7	438	350	488	333	385	397	tudor domain containing 7
PIK3R1	314	417	411	402	370	397	phosphoinositide-3-kinase, regulatory subunit 1 (alpha)
PRR11	559	379	569	373	372	397	proline rich 11
DNAJC17	428	386	419	307	306	397	DnaJ (Hsp40) homolog, subfamily C, member 16
LOC104917345	363	414	342	465	429	396	ryanodine receptor 1-like
AEN	594	439	474	327	431	396	apoptosis enhancing nuclease
PIP5K1A	416	414	441	373	428	396	phosphatidylinositol-4-phosphate 5-kinase, type I, alpha
WDR90	552	373	414	369	372	396	WD repeat domain 90
MYO1E	431	325	427	348	362	396	myosin IE
RGS10	502	352	492	333	383	396	regulator of G-protein signaling 10
LOC104910711	379	429	426	386	425	396	uncharacterized LOC104910711
LOC104914807	539	456	496	554	363	396	talin-1-like
KLHL18	497	386	487	341	368	396	kelch-like family member 17
GAS1							phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminoimidazole synthetase
	384	305	405	289	357	396	uncharacterized LOC104910453
LOC104910453	1233	342	696	423	858	396	general transcription factor IIIC, polypeptide 5, 63kDa
GTF3C6	433	372	391	275	324	396	dolichyldiphosphatase 1
DONSON	620	392	481	319	386	395	BUB3 mitotic checkpoint protein
BUD13	454	396	429	364	360	395	calmodulin regulated spectrin-associated protein 1
CAMSAP2	455	377	427	433	427	395	
TEAD1							TEA domain family member 1 (SV40 transcriptional enhancer factor)
	327	339	394	491	391	395	pleckstrin homology domain containing, family F (with FYVE domain) member 2
PLEKHF2							tripeptidyl peptidase I
	375	364	394	309	365	395	membrane-bound transcription factor site-2 protease-like
TPP1	409	471	438	414	413	395	zinc finger protein 277
LOC104909310	313	349	318	326	312	395	platelet-derived growth factor receptor, alpha polypeptide
ZNF277	441	338	411	354	374	395	kelch-like protein 1
PDGFRA	405	356	417	553	383	395	ribosomal protein S6 kinase, 70kDa, polypeptide 1
LOC100550180	476	417	456	401	416	395	ligase III, DNA, ATP-dependent
RPS6KB1	400	360	399	384	389	394	asparaginyl-tRNA synthetase 2, mitochondrial (putative)
LIG4	394	380	395	407	393	394	leucine rich repeat containing 45
NARS2	352	328	350	332	283	394	
LRRC45	444	452	494	384	432	394	sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4B
SEMA4B							cytochrome c oxidase assembly protein COX15 homolog
	525	419	457	410	367	394	cell wall protein DAN4-like
LOC100546258	467	367	417	407	352	394	K(lysine) acetyltransferase 6A
LOC104912665	520	357	460	383	463	394	family with sequence similarity 45, member A
KAT6B	324	381	355	380	369	394	uncharacterized LOC104911952
FAM46A	365	444	440	421	373	394	Rho GTPase activating protein 29
LOC104911952	372	372	392	414	404	394	integrator complex subunit 10
ARHGAP29	396	380	414	443	400	394	RAB34, member RAS oncogene family
INTS12	433	374	456	385	377	394	Rho guanine nucleotide exchange factor (GEF) 3
RAB34	484	403	437	353	385	394	isocitrate dehydrogenase 3 (NAD+) beta
ARHGEF3	366	350	383	414	364	394	multiple EGF-like-domains 9
IDNK	342	357	389	302	282	394	SH3-domain GRB2-like 1
MEGF9	503	432	389	316	363	394	
SH3GL1	498	387	471	419	457	394	NADH dehydrogenase (ubiquinone) complex I, assembly factor 6
NDUFAF6							missing oocyte, meiosis regulator, homolog (Drosophila)
	439	380	428	349	377	394	neurexin-1-beta-like
MIOS	364	355	397	403	322	393	protein SFI1 homolog
LOC100544434	506	387	490	312	363	393	
LOC104913550	325	319	345	371	339	393	dual specificity tyrosine-phosphorylation-regulated kinase 1B-like
LOC104915877							kinesin family member 3A
	460	373	407	441	402	393	eukaryotic translation initiation factor 3 subunit C-like
KIF3B	405	404	416	419	379	393	EFR3 homolog A (S. cerevisiae)
LOC104917110	425	387	418	436	411	393	chromosome 11 open reading frame, human C2orf82
EFR3B	599	376	550	397	454	393	coiled-coil domain containing 63
C11H3orf33	421	467	442	388	431	393	Rho GTPase activating protein 12
CCDC64	472	418	468	360	375	393	quiescin Q6 sulfhydryl oxidase 2
ARHGAP12	500	397	461	378	366	393	G protein subunit alpha L
QSOX2	407	358	472	334	382	393	katanin p60 (ATPase containing) subunit A 1
LOC100546750	414	403	411	384	321	393	C-type lectin domain family 16, member A
KATNAL1	552	428	495	401	420	392	prenyl (decaprenyl) diphosphate synthase, subunit 1
CLEC19A	253	561	294	516	404	392	scavenger receptor class A, member 5
PDSS1	353	297	335	341	324	392	ATPase, Cu++ transporting, alpha polypeptide
SCARA5	353	717	291	512	402	392	SET binding protein 1
ATP7A	350	366	350	431	490	392	DNA-directed RNA polymerase II subunit RPB1-like
SETBP1	279	373	344	424	253	392	family with sequence similarity 212, member B
LOC104916258	408	229	382	327	365	392	cyclin-dependent kinase-like 2 (CDC2-related kinase)
FAM213A	522	399	458	430	536	392	chromosome 10 open reading frame, human C1orf27
CDKL5	433	362	454	383	370	391	peptidyl-prolyl cis-trans isomerase-like 1
C10H1orf52	377	398	368	348	325	391	zinc finger, CCHC domain containing 7
LOC100547611	379	300	400	340	391	391	BEN domain containing 3
ZCCHC7	389	335	381	312	313	391	myelin-oligodendrocyte glycoprotein-like
BEND3	490	341	395	316	382	391	
LOC100547218	410	351	424	331	311	391	

EPB41	426	333	404	397	425	391	endothelial PAS domain protein 1
SLC45A4	474	328	385	371	375	391	solute carrier family 45, member 4
FRMD1	423	370	404	348	401	390	fyn-related Src family tyrosine kinase
MACF1	580	404	436	483	466	390	microtubule-actin crosslinking factor 1
TMEM223	455	451	402	362	433	390	transmembrane protein 223
LCA5L	304	369	323	350	275	390	Leber congenital amaurosis 5
TRAF4	443	387	505	370	475	390	TNF receptor-associated factor 4
PLCG1	491	387	450	378	439	390	phospholipase C, gamma 1
RAB6A	374	314	397	322	370	390	RAB6A, member RAS oncogene family
ZMYND19	545	385	462	300	414	390	zinc finger, MYND-type containing 19
SPRED2	435	348	473	388	400	390	sprouty-related, EVH1 domain containing 2
LOC104915869	426	376	412	398	370	390	uncharacterized LOC104915869
ACBD7	513	506	516	357	503	390	acyl-CoA binding domain containing 7
LOC104915138	337	310	368	291	293	389	uncharacterized LOC104915138
LOC100548069	513	472	411	331	389	389	cryptic protein-like
PPL	296	584	276	544	225	389	periplakin
SLC25A17							solute carrier family 25 (mitochondrial carrier; peroxisomal membrane protein, 34kDa), member 17
LOC104909493	473	351	461	358	383	389	neuronal PAS domain-containing protein 4-like
KIF26A	445	508	387	408	448	389	kinesin family member 25
FASTKD5	474	358	460	367	501	389	FAST kinase domains 3
LOC100550605	480	330	426	315	341	389	tumor suppressor p53-binding protein 1
KIN	481	410	504	471	397	388	kinesin family member C3
GJA4	446	393	391	364	413	388	gap junction protein, alpha 3, 46kDa
GLTSCR1L	437	440	445	401	465	388	glycolipid transfer protein
FASTKD3	279	346	344	358	327	388	FAST kinase domains 2
LOC104910693	496	418	448	430	512	388	teneurin-3
LOC104914250	437	547	485	442	442	388	uncharacterized LOC104914250
LOC100539236	285	363	342	359	364	387	avidin-like
NFIC	533	619	538	462	484	387	nuclear factor I/C (CCAAT-binding transcription factor)
ERO1L	478	399	452	348	458	387	endoplasmic reticulum to nucleus signaling 2
ARRDC2	456	340	431	286	380	387	arrestin domain containing 2
KLF7	343	355	366	686	331	387	Kruppel-like factor 6
PCDH12	382	407	372	389	379	387	protocadherin 12
CHIC1	417	345	426	371	410	387	chromogranin B (secretogranin 1)
MLYCD	444	373	431	345	378	387	malonyl-CoA decarboxylase
DUS3L	336	365	378	404	323	386	dihydrouridine synthase 2
LOC104916692	497	399	437	343	400	386	uncharacterized LOC104916692
LOC100548686	461	190	389	274	339	386	uncharacterized protein KIAA0825-like
PER2	667	430	491	384	583	386	period circadian clock 2
PYROXD1	366	461	353	291	286	386	pyridine nucleotide-disulphide oxidoreductase domain 1
LOC104917050	553	389	502	351	422	386	tripartite motif-containing protein 3-like
NOP10	524	444	462	408	481	386	NOP10 ribonucleoprotein
C1R	464	465	389	413	404	385	C1q and tumor necrosis factor related protein 8
RNF215	384	316	337	332	355	385	ring finger protein 215
NTRK3	458	468	422	453	400	385	neurotrophic tyrosine kinase, receptor, type 3
CRTC1	306	356	286	463	310	385	cartilage associated protein
ZNF131	389	358	386	381	388	385	zinc finger protein 131
BCL9L	360	363	407	309	313	385	B-cell CLL/lymphoma 9-like
DIS3L2	444	410	443	426	489	385	DIS3 like exosome 3'-5' exoribonuclease
ZBTB39	419	390	444	398	388	385	zinc finger and BTB domain containing 39
LOC100541693	442	396	435	373	347	385	olfactory receptor 14J1-like
AKAP11	354	338	344	381	401	385	A kinase (PRKA) anchor protein 11
RPP40	456	423	424	418	389	384	ribonuclease P/MRP 40kDa subunit
KLHL22	494	318	476	309	361	384	kelch-like family member 21
SLC37A1	412	362	404	410	431	384	
DENND3	342	339	357	320	326	384	solute carrier family 37 (glucose-6-phosphate transporter), member 1
LOC100539447	424	345	375	366	358	384	DENN/MADD domain containing 2D
BTBD2	571	281	314	478	529	384	tensin-3
RPAP2	446	436	372	443	376	384	BTB (POZ) domain containing 19
ZBTB26	395	339	374	410	370	384	RNA polymerase II associated protein 2
TEK	443	355	388	345	392	384	zinc finger and BTB domain containing 26
SPATA2	391	328	426	368	389	384	TEK tyrosine kinase, endothelial
TANGO6	394	388	376	357	370	384	spermatogenesis associated 2
ERI1	366	374	343	392	340	384	transport and golgi organization 6 homolog (Drosophila)
FAM69C	446	344	443	328	413	384	enhancer of rudimentary homolog (Drosophila)
GLMN	421	349	411	349	345	383	family with sequence similarity 69, member B
ITGB3	370	315	390	330	394	383	GLIS family zinc finger 1
FBXO5	444	404	399	352	457	383	integrin, beta 2 (complement component 3 receptor 3 and 4 subunit)
LOC104911422	466	366	457	328	328	383	F-box protein 48
GPRIN3	396	341	407	368	381	383	GTP-binding protein 10-like
MTCH1	412	304	415	353	423	383	G protein regulated inducer of neurite outgrowth 2
CDKAL1	528	410	461	349	441	383	mitochondrial carrier 1
CINP	399	369	415	320	393	383	cyclin-dependent kinase 9
LOC104913068	451	387	427	380	369	383	cartilage intermediate layer protein 2
SLC6A9	601	474	485	273	371	382	DNA replication factor Cdt1-like
	466	338	378	349	336	382	solute carrier family 6 (neurotransmitter transporter, glycine), member 9

MDM1	394	337	420	350	393	382	Mdm1 nuclear protein homolog (mouse)
SMPD1	516	472	487	461	444	382	sphingomyelin phosphodiesterase 1, acid lysosomal
C3H1orf8	342	366	380	469	358	382	chromosome 3 open reading frame, human C18orf63
ALG8	432	344	381	328	317	381	ALG8, alpha-1,3-glucosyltransferase
LOC104910538	391	380	377	342	349	381	uncharacterized LOC104910538
DDRGK1	459	370	377	356	367	381	discoidin domain receptor tyrosine kinase 2
SH2B3	459	308	440	329	476	381	SH2B adaptor protein 3
AMDHD2	470	369	410	343	436	381	amidohydrolase domain containing 2
ECM1	559	550	574	481	670	381	enoyl-CoA delta isomerase 2
IGDCC4	398	349	416	398	358	381	immunoglobulin superfamily, DCC subclass, member 3
ELL	493	478	475	507	519	381	ELK4, ETS-domain protein (SRF accessory protein 1)
LOC100542457	408	447	349	436	304	380	tripartite motif-containing protein 7-like
GSG2	543	336	435	312	340	380	GSG1-like
HECW2							
	381	394	354	373	267	380	HECT, C2 and WW domain containing E3 ubiquitin protein ligase 1
CRACR2B	395	423	410	451	451	380	cellular retinoic acid binding protein 2
LOC104912287	167	376	184	373	202	380	uncharacterized LOC104912287
UHRF1BP1	390	425	392	450	457	380	UHRF1 binding protein 1
LOC104912647	479	354	444	444	539	380	ephrin type-B receptor 1-like
LOC104911864	301	334	285	300	380	379	uncharacterized LOC104911864
NHSL2	522	440	465	378	395	379	NHS-like 2
CHST15							
	331	283	319	306	333	379	carbohydrate (N-acetylgalactosamine 4-0) sulfotransferase 14
SWT1	345	366	373	358	344	379	SWT1 RNA endoribonuclease homolog (S. cerevisiae)
FRA10AC1	469	347	430	402	417	379	fucose-1-phosphate guanylyltransferase
TMEM62	340	324	373	365	384	379	transmembrane protein 62
TGFB2	423	326	405	405	448	379	transforming growth factor, beta 2
STGALNAC4							ST6 (alpha-N-acetyl-neuraminy-2,3-beta-galactosyl-1,3)-N-
	328	478	324	429	329	379	acetylgalactosaminide alpha-2,6-sialyltransferase 4
OSBPL10	375	570	429	450	356	379	oxysterol binding protein-like 10
INTS10	468	341	404	366	442	378	integrator complex subunit 1
SMCR8	472	406	435	411	471	378	Smith-Magenis syndrome chromosome region, candidate 8
FRS3	379	362	393	389	390	378	fibroblast growth factor receptor substrate 2
MRPL52	451	338	349	303	416	378	mitochondrial ribosomal protein L52
LYSMD3							
	383	346	431	358	344	378	LysM, putative peptidoglycan-binding, domain containing 3
LOC104912797	388	393	349	354	360	378	uncharacterized LOC104912797
AP4S1	440	527	370	355	325	378	adaptor-related protein complex 4, sigma 1 subunit
BID	455	325	474	368	369	378	BH3 interacting domain death agonist
TAF5							TAF5 RNA polymerase II, TATA box binding protein (TBP)-associated
	496	391	431	408	423	378	factor, 100kDa
C7H2orf69	414	372	407	340	356	378	chromosome 7 open reading frame, human C2orf66
CHFR	399	328	417	339	397	378	calcium homeostasis endoplasmic reticulum protein
LOC100541541	292	390	348	464	362	378	claw keratin-like
NDC80	438	313	454	361	304	377	NDC80 kinetochore complex component
TGFBRAP1							
	390	376	419	371	411	377	transforming growth factor, beta receptor associated protein 1
LOC104915924	376	312	359	377	406	377	uncharacterized LOC104915924
C6H1orf35	382	374	422	301	336	377	complement component 6
CEP104	399	331	388	366	386	377	centromere protein W
LOC104916047							
	316	480	369	453	309	377	cytochrome c oxidase subunit 7C, mitochondrial pseudogene
LRRC42	600	378	554	336	439	377	leucine rich repeat containing 42
C5H15orf57	409	367	365	381	390	377	chromosome 5 open reading frame, human C15orf52
LOC104912701	442	464	411	385	451	377	PHD finger protein 13-like
FAM110B	477	328	489	332	383	377	family with sequence similarity 109, member B
RNF113A	371	358	368	320	299	377	ring finger protein 113A
PLEKHA3							pleckstrin homology domain containing, family A (phosphoinositide
	435	352	379	304	405	377	binding specific) member 3
TTPAL	422	361	394	369	349	377	tocopherol (alpha) transfer protein-like
FAM69B	414	400	403	406	362	377	family with sequence similarity 69, member A
RP56KC1	353	350	387	341	351	376	ribosomal protein S6 kinase, 52kDa, polypeptide 1
LOC104910406	414	361	426	336	388	376	uncharacterized LOC104910406
PPP1R3D	295	354	326	410	360	376	protein phosphatase 1, regulatory subunit 3D
FBXL8	369	347	387	341	474	376	F-box and leucine-rich repeat protein 7
BCL10	400	358	398	312	297	376	B-cell CLL/lymphoma 10
GPATCH11	413	336	408	333	345	376	G patch domain containing 1
LOC104910953	434	297	447	326	393	376	transaldolase-like
CHAD							
	302	951	409	641	411	376	ChaC glutathione-specific gamma-glutamylcyclotransferase 1
LOC100544756	383	331	380	401	334	376	transcription factor GATA-4
FAM105A	527	432	443	335	325	376	family with sequence similarity 104, member A
MPP7							
	254	363	306	294	271	375	membrane protein, palmitoylated 7 (MAGUK p55 subfamily member 7)
LPIN2	491	325	475	363	365	375	lipin 2
CNKSR1	247	610	253	456	469	375	cornichon family AMPA receptor auxiliary protein 4
DCPS	547	379	469	317	368	375	decapping mRNA 2
LOC100546766	425	368	382	387	382	375	hypoxanthine-guanine phosphoribosyltransferase-like

TCEANC2						transcription elongation factor A (SII) N-terminal and central domain
	376	366	401	336	347	375
C4H4orf46	510	397	446	364	392	375
METTL9	461	385	395	359	339	375
ERLIN1	557	331	454	340	429	375
LOC100545963	428	341	364	393	339	375
TPGS2	383	328	386	287	254	375
AZI2	421	352	426	364	382	375
ST8SIA1						5-azacytidine induced 2
	408	520	394	328	349	375
ANKZF1	436	406	447	384	399	375
EMILIN1	422	436	413	270	372	375
APPL2						adaptor protein, phosphotyrosine interaction, PH domain and leucine
	409	316	376	343	338	375
ELP2	452	320	368	336	373	374
UBAP1	380	317	380	372	290	374
ERI3	467	374	397	385	372	374
MRPL23	431	296	413	312	397	374
ADAMTSL3	356	328	367	390	331	374
PIGS	421	399	435	366	371	374
CENPT	418	305	388	290	313	374
TMCO3	379	414	366	388	415	374
HYAL2	454	401	436	318	373	374
LOC104912064						hyaluronoglucosaminidase 1
	506	270	401	263	382	374
PGAP2	482	401	392	380	410	374
TMEM200B	423	373	413	312	449	373
PARP4	283	342	344	395	350	373
LOC100546839	505	424	462	399	449	373
UROS	502	304	460	314	511	373
LOC100546418	446	425	396	350	377	373
TRIM7	259	514	283	381	349	373
RPS6KL1	409	377	427	392	453	373
C23H1orf86	470	381	403	333	285	373
SARS2	443	366	418	341	339	373
LOC104916948	290	218	296	325	480	373
BLOC1S6						sortilin-like
	439	359	442	341	414	372
DROSHA	437	325	435	362	331	372
BEND7	433	356	410	418	347	372
LOC104915361	222	347	282	346	221	372
MSH3	429	357	462	338	297	372
SHPRH						mutS homolog 3
	313	341	334	378	289	372
LOC104911460	444	414	430	396	460	372
GABPB1						SNF2 histone linker PHD RING helicase, E3 ubiquitin protein ligase
	530	382	534	407	452	372
CZH9orf41	370	276	370	311	267	371
TP53I3	277	409	306	420	350	371
JAK2	461	385	374	458	444	371
LOC100547156	447	339	417	360	434	371
KPNA3	583	439	540	543	422	371
PAK4	439	317	448	360	394	371
GOLGA7B	347	371	379	339	384	371
LOC104909514	373	364	398	339	391	371
LOC100541791	369	364	369	454	390	371
CASP2	429	347	374	353	357	371
LOC104909670	403	300	378	327	337	371
SLBP	547	389	462	265	320	371
FOXP1	400	356	418	368	354	371
TOR2A	442	433	366	318	411	371
ZNF827	411	351	380	380	373	370
CDT1						torsin family 2, member A
	686	476	537	300	416	370
DHRS9	477	412	465	498	426	370
TCF15	367	391	368	363	399	370
TNC	425	544	584	299	574	370
ERO1LB	381	341	316	346	318	370
C1H11orf54	361	402	367	394	352	370
C4H4orf33	488	382	341	324	405	369
PTCHD2	318	303	368	357	301	369
LOC104914955	260	301	264	257	234	369
QKI	437	351	416	427	353	369
LOC104911406	427	393	395	412	405	368
TMEM41A	465	311	438	308	405	368
ALKBH3	392	354	385	396	393	368
ITGB3BP	402	329	393	267	289	368
KIAA1407	459	310	420	313	350	368
						alkB, alkylation repair homolog 3 (E. coli)
						integrin, beta 3 (platelet glycoprotein IIIa, antigen CD61)
						KIAA1377 ortholog

XRCC3							
LOC104913724	375	291	418	301	319	368	X-ray repair complementing defective repair in Chinese hamster cells 3
TDP2	249	383	241	446	329	367	putative germ cell-specific gene 1-like protein 2
LOC104915811	437	378	403	368	326	367	tyrosyl-DNA phosphodiesterase 2
	411	337	369	292	291	367	phosphoenolpyruvate carboxykinase [GTP], mitochondrial-like
LOC104916303	381	365	357	403	367	367	mRNA cap guanine-N7 methyltransferase-like
CTPS2	372	346	392	319	305	367	CTP synthase 1
PLA2G4A							
USB1	440	303	428	291	363	367	phospholipase A2, group IVA (cytosolic, calcium-dependent)
SLC35B2	411	354	417	326	428	367	U6 snRNA biogenesis 1
	456	399	407	331	416	367	solute carrier family 35 (adenosine 3'-phospho 5'-phosphosulfate transporter), member B2
LOC100542432	237	309	258	287	195	366	mucin-5B
LOC100547559	267	358	255	344	307	366	selenoprotein F
CENPQ	404	331	375	309	326	366	centromere protein P
FAM78B	522	405	422	398	486	366	family with sequence similarity 78, member A
POLE	577	398	517	326	340	366	polymerase (DNA directed), epsilon, catalytic subunit
MPEG1	459	329	408	391	458	366	macrophage expressed 1
SMG6	422	357	443	466	380	366	SMG6 nonsense mediated mRNA decay factor
LOC104909453	382	317	376	316	316	366	5'-3' exoribonuclease 2-like
C1QA	361	299	379	425	413	366	chromosome 1 open reading frame, human CXorf36
BST1	342	325	395	331	321	366	B-box and SPRY domain containing
LOC100543251	446	367	450	332	314	366	serine/threonine-protein kinase PAK 1-like
CTU2	397	353	379	293	364	366	CTTNBP2 N-terminal like
CRABP2	305	427	198	273	231	366	cellular retinoic acid binding protein 1
LIMK2	453	352	404	323	366	365	LIM domain kinase 1
LOC100543023	469	293	374	303	396	365	myosin-7-like
LOC100549863	374	284	360	296	361	365	homeobox protein Hox-C10-like
SPAG5	453	347	392	277	304	365	sperm associated antigen 5
APRT	465	433	359	362	374	364	adenine phosphoribosyltransferase
HEMK1	460	368	417	376	373	364	hemogen
MANBA	346	386	328	416	352	364	mannosidase, beta A, lysosomal
EIF4E3	354	394	359	407	363	364	eukaryotic translation initiation factor 4E family member 2
KLF4	329	445	335	338	259	364	Kruppel-like factor 3 (basic)
LOC100547230	413	360	358	331	388	364	protein disulfide-isomerase A5
GTF3C5	341	323	374	322	302	364	general transcription factor IIIC, polypeptide 4, 90kDa
CDC42	402	274	415	320	302	364	cell division cycle 6
PRRG3							
	386	387	350	329	350	364	proline rich Gla (G-carboxyglutamic acid) 3 (transmembrane)
MAU2	370	348	379	421	354	364	MAU2 sister chromatid cohesion factor
RGS4	397	411	404	369	449	363	regulator of G-protein signaling 4
SMIM3	369	320	394	368	393	363	small integral membrane protein 3
CSH14orf169	427	361	402	331	364	363	chromosome 5 open reading frame, human C14orf166
LOC100539298	203	396	288	236	301	363	little elongation complex subunit 1-like
BNIP1	409	353	384	305	364	363	BCL2/adenovirus E1B 19kDa interacting protein 1
LOC104910964							
	453	376	404	318	343	363	cleavage and polyadenylation specificity factor subunit 7-like
LRR8D	461	304	417	304	397	363	leucine rich repeat containing 8 family, member D
CZH9orf64	479	347	489	343	352	363	chromosome 2 open reading frame, human C9orf41
LOC104911455	379	382	381	335	360	363	uncharacterized LOC104911455
IKBIP	513	395	463	329	426	363	IK cytokine, down-regulator of HLA II
CCDC97	481	376	419	370	402	362	coiled-coil domain containing 96
LOC100542090	173	78	34	401	339	362	alpha-1-antitrypsin-like
ZNF513	507	387	441	331	416	362	zinc finger protein 513
EED	481	404	425	339	349	362	early endosome antigen 1
LOC100538966	355	360	402	306	309	362	centlein-like
AAGAB	531	321	478	317	378	362	alpha- and gamma-adaptin binding protein
FAM104A	416	375	406	332	364	362	family with sequence similarity 103, member A1
CLK2	408	404	388	331	401	361	CDC-like kinase 1
ANKS3	366	386	414	339	389	361	ankyrin repeat and sterile alpha motif domain containing 3
SNAP47	350	384	324	365	361	361	synaptosomal-associated protein, 47kDa
LOC100549940	395	287	334	300	371	361	protein FAM184A-like
MTHFS	359	349	357	362	365	361	methenyltetrahydrofolate synthetase domain containing
SLC3A1	310	353	314	313	325	361	solute carrier organic anion transporter family, member 3A1
LOC100542520	423	371	442	388	459	361	rho-related GTP-binding protein RhoB
LOC100546893	343	371	370	392	286	360	cholinephosphotransferase 1-like
SLC25A33							
	360	290	353	339	314	360	solute carrier family 25 (pyrimidine nucleotide carrier), member 33
HID1	335	407	355	355	359	360	hypermethylated in cancer 2
LOC104915094	303	298	319	326	301	360	vacuolar protein sorting-associated protein 13A
SUN2	371	360	372	430	336	360	Sad1 and UNC84 domain containing 2
LOC100548053	469	597	404	772	420	360	SNF-related serine/threonine-protein kinase-like
KERA	709	285	618	338	416	360	Kell blood group, metallo-endopeptidase
LOC104909213							
	304	287	312	334	321	360	delta(3,5)-Delta(2,4)-dienoyl-CoA isomerase, mitochondrial-like
GLP1R	304	332	350	281	301	360	glyoxalase domain containing 5
CAPN2	386	415	381	342	408	359	calpain 15
NMI	429	343	414	351	371	359	N-myc (and STAT) interactor

ARFRP1	469	361	369	307	325	359	ADP-ribosylation factor related protein 1
OLFML1	325	382	390	361	415	359	olfactomedin-like 1
LOC104912282	385	362	389	386	344	359	dual specificity protein phosphatase CDC14A-like
LOC104912151	358	264	345	332	357	359	ribosomal biogenesis protein LAS1L-like
SLC12A9	447	414	446	388	365	359	solute carrier family 12, member 9
CRADD	439	378	423	318	359	359	calcium release activated channel regulator 2B
GRIA3	565	382	440	323	327	359	glutamate receptor, ionotropic, AMPA 2
CTNS	425	298	391	317	343	358	catenin (cadherin-associated protein), delta 2
TERF1	454	307	396	273	269	358	telomeric repeat binding factor (NIMA-interacting) 1
LOC104910780	427	274	370	292	318	358	sec1 family domain-containing protein 2-like
C1H7orf55	397	423	347	301	318	358	chromosome 1 open reading frame, human C7orf49
COMMD1							collagen-like tail subunit (single strand of homotrimer) of asymmetric
	368	378	376	340	376	358	acetylcholinesterase
RRAGC	450	302	425	314	359	358	Ras-related GTP binding C
DUSP6	423	338	409	330	349	358	dual specificity phosphatase 5
SMG8	474	406	436	381	437	358	SMG8 nonsense mediated mRNA decay factor
GAS2	410	390	460	296	356	358	growth arrest-specific 1
LOC100547805	327	336	394	382	348	357	cationic amino acid transporter 2-like
LOC104915566	375	370	338	371	392	357	scaffold attachment factor B1-like
RPUSD2	464	346	369	269	329	357	RNA pseudouridylate synthase domain containing 2
LOC100539804	192	215	267	339	303	357	neurobeachin-like
LOC104912855	510	364	484	373	455	357	uncharacterized LOC104912855
LOC100539010	373	443	386	424	345	357	glutamine synthetase
SLC25A48	430	187	366	258	364	357	solute carrier family 25, member 48
GRIN2C	322	378	278	371	293	357	glutamate receptor, ionotropic, N-methyl D-aspartate 2B
LAMA3	385	483	416	516	273	357	laminin, alpha 1
LOC100543500	620	348	582	308	601	356	olfactory receptor 14C36-like
TMEM109	281	494	307	376	304	356	transmembrane protein 109
PSAT1	328	250	360	273	330	356	phosphoserine aminotransferase 1
CEP135	460	335	441	319	310	356	centrosomal protein 131kDa
LOC100551380	384	373	407	357	315	356	RUN and FYVE domain-containing protein 1-like
SKI	360	368	379	365	351	356	SKI proto-oncogene
LOC104915954	184	366	220	302	249	356	glutaryl-CoA dehydrogenase, mitochondrial-like
CLPTM1	458	352	381	376	374	356	colipase, pancreatic
CYR1	414	328	376	272	317	356	cytohesin 1 interacting protein
LOC100548653	312	284	341	303	333	356	polypeptide N-acetylgalactosaminyltransferase-like 6
CDC37L1	404	342	369	366	373	356	cell division cycle 37
NEDD8							
	413	569	398	446	381	356	neural precursor cell expressed, developmentally down-regulated 8
MECR	435	336	431	302	460	356	mitochondrial trans-2-enoyl-CoA reductase
FAM151B	346	289	381	306	280	355	family with sequence similarity 150, member B
LOC104912786	290	308	281	288	252	355	uncharacterized LOC104912786
LOC104916188	419	387	360	376	381	355	ataxin-7-like protein 3
SIK2	440	377	418	362	363	355	salt-inducible kinase 2
SHMT1	405	282	341	266	327	355	serine hydroxymethyltransferase 1 (soluble)
SLC35C1							
	436	401	400	366	406	355	solute carrier family 35 (GDP-fucose transporter), member C1
LATS2	408	354	402	360	340	355	large tumor suppressor kinase 1
LOC104913328	457	420	402	422	387	355	dihydropyrimidinase-related protein 3-like
PCDH1	383	354	401	368	367	354	protocadherin 1
STXBP6	406	359	408	322	380	354	syntaxin binding protein 6 (amisyn)
ATE1	331	297	343	349	365	354	arginyltransferase 1
LOC100544585	362	307	349	325	331	354	caspase-3-like
DCP1A	417	339	426	390	368	354	decorin
BRD3	434	394	403	428	385	354	bromodomain containing 1
MPPED2	447	388	457	397	436	354	metallophosphoesterase domain containing 2
PHACTR4	432	396	424	382	420	354	phosphatase and actin regulator 4
DIXDC1	374	304	331	283	370	354	dispatched homolog 2 (Drosophila)
BLVRA	311	350	314	309	278	354	biliverdin reductase A
RUFY1	333	349	363	376	339	353	RUN and FYVE domain containing 1
LOC104913930							
	317	323	350	415	391	353	mediator of RNA polymerase II transcription subunit 13-like
LOC104916924	444	280	398	309	336	353	interleukin enhancer-binding factor 3-like
CRYZL1	348	348	364	372	345	353	crystallin, zeta (quinone reductase)
MXD1	412	361	361	375	395	353	MAX dimerization protein 1
LOC104914977	303	305	326	308	269	353	ribosome-releasing factor 2, mitochondrial-like
RGS3	366	386	408	327	328	353	regulator of G-protein signaling 3
BTBD9	402	331	411	380	371	353	BTB (POZ) domain containing 8
SOX4	400	306	398	295	386	353	SRY (sex determining region Y)-box 4
C4H4orf48	368	263	344	291	361	353	chromosome 4 open reading frame, human C4orf47
BPNT1	337	324	346	312	344	352	3'(2'), 5'-bisphosphate nucleotidase 1
LOC104909362	400	306	389	363	388	352	G1/S-specific cyclin-D2
LOC104915330	324	334	326	303	327	352	uncharacterized LOC104915330
LOC104912583							phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit beta
	330	302	315	321	310	352	isoform-like
LOC104913773	342	337	352	306	348	352	uncharacterized LOC104913773
LOC104916992	239	467	251	338	290	352	uncharacterized LOC104916992
WDR6	387	392	346	296	309	352	WD repeat domain 6
LOC104915348	359	297	393	281	292	352	uncharacterized LOC104915348

TBC1D24	425	289	443	271	411	352	TBC1 domain family, member 24
FARS2	318	355	336	341	328	352	FERM, RhoGEF and pleckstrin domain protein 2
DNAJC25	456	391	431	357	371	352	DnaJ (Hsp40) homolog, subfamily C, member 24
KCTD18	328	362	369	345	286	351	potassium channel tetramerization domain containing 17
LOC104911665	320	336	319	302	334	351	uncharacterized LOC104911665
METTL6	445	318	435	318	368	351	methyltransferase like 6
LOC100545421	297	301	312	336	271	351	cytochrome P450 1B1 pseudogene
CEP290	373	303	384	350	324	351	centrosomal protein 250kDa
LOC104909312							ectonucleotide pyrophosphatase/phosphodiesterase family member 1-like
	312	374	367	389	289	351	
TDP1	441	366	439	358	329	350	tyrosyl-DNA phosphodiesterase 1
LOC100547923	430	377	394	329	362	350	cat eye syndrome critical region protein 2-like
SGSM2	378	317	340	359	380	350	small G protein signaling modulator 2
LOC100549141	583	1545	647	457	368	349	feather keratin Cos1-1/Cos1-3/Cos2-1-like
SNAP29	349	284	358	341	366	349	synaptosomal-associated protein, 29kDa
LOC104913310	398	334	388	337	324	349	lysine-specific demethylase 3B-like
LOC104912917	373	327	380	336	346	349	SUMO-activating enzyme subunit 2-like
CAD	626	354	488	294	336	349	calcyclin binding protein
SARNP	449	319	428	365	380	349	SAP domain containing ribonucleoprotein
TIAM1	378	301	384	353	350	349	T-cell lymphoma invasion and metastasis 1
PARP11	360	305	368	392	355	349	poly (ADP-ribose) polymerase family, member 11
SEC22A							
	393	305	361	298	351	349	SEC22 vesicle trafficking protein homolog A (S. cerevisiae)
LOC100549525	369	441	348	405	377	348	DNA excision repair protein ERCC-6
EGLN1	431	365	408	365	381	348	epidermal growth factor receptor
VGLL4	341	297	352	324	292	348	vestigial-like family member 4
CPNE2	231	318	242	317	252	348	copine 1
RFWD3	402	348	374	301	296	348	ring finger and WD repeat domain 3
LOC100539357	292	286	297	356	378	348	condensin complex subunit 1-like
LOC104916115	469	333	404	323	350	348	ceramide synthase 2-like
INO80D	383	366	371	434	333	348	INO80 complex subunit C
CENPC	392	295	392	269	291	348	centromere protein A
LOC104913606	437	303	379	234	342	347	probable RNA-binding protein 19
MYF5	387	420	329	341	315	347	myogenic factor 5
LOC104915761	320	402	353	362	347	347	josephin-2-like
DNA2	553	451	495	318	282	347	Dmx-like 2
LOC104911707	430	345	416	362	390	347	cordon-bleu protein-like 1
TRIM37	393	333	310	313	341	347	tripartite motif containing 37
LOC104914707	321	312	279	205	300	347	uncharacterized LOC104914707
SCN2B	271	427	282	341	385	347	sodium channel, voltage-gated, type II, beta subunit
WTIP	354	360	352	296	279	347	Wilms tumor 1 interacting protein
PP1L1	387	348	352	268	298	347	peptidylprolyl isomerase (cyclophilin)-like 1
LOC100545820	302	304	321	353	319	347	class I histocompatibility antigen, F10 alpha chain-like
UBE2T	419	332	402	265	269	347	ubiquitin-conjugating enzyme E2T (putative)
GABPB2	428	383	385	334	328	346	GA binding protein transcription factor, beta subunit 1
FAN1	390	306	378	297	348	346	family with sequence similarity 98, member B
LETM2	399	311	360	282	369	346	leucine zipper-EF-hand containing transmembrane protein 1
TBCCD1	400	309	342	261	324	346	TBCC domain containing 1
LOC104911751	284	246	327	318	255	346	integral membrane protein GPR155
IL4R	452	349	384	406	375	346	interleukin 4 induced 1
RAD52	433	386	413	320	313	346	RAD52 homolog (S. cerevisiae)
LOC104913736	413	301	372	313	408	346	caseinolytic peptidase B protein homolog
LOC104916383	377	306	374	348	310	346	lamin-A-like
PNPLA6	276	324	301	375	360	346	patatin-like phospholipase domain containing 6
LOC104917537	439	295	365	274	318	346	nucleoporin p58/p45
KIDINS220	374	310	376	414	327	346	KIAA2026 ortholog
RBP5	369	318	364	261	347	345	retinol binding protein 5, cellular
GNPDA2	428	358	420	349	363	345	glyceronephosphate O-acyltransferase
NDOR1	400	308	351	329	348	345	NADPH dependent diflavin oxidoreductase 1
SLC4A2	464	387	370	337	415	345	solute carrier family 4 (anion exchanger), member 2
LCORL	393	365	392	353	322	345	ligand dependent nuclear receptor corepressor
LOC100549803	520	390	465	354	375	345	cytochrome b-c1 complex subunit 10
ANKIB1	425	355	411	374	377	345	ankyrin repeat and IBR domain containing 1
TP53INP1	270	278	339	350	347	345	tumor protein p53 inducible nuclear protein 1
CDKN3	421	286	380	250	336	345	cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)
NCOA7	365	321	370	310	342	345	nuclear receptor coactivator 7
SLCO2B1	377	306	403	361	400	345	solute carrier organic anion transporter family, member 2B1
HPCAL1	457	347	427	300	331	345	hippocalcin
LOC104909580	377	265	386	282	367	345	corepressor interacting with RBPJ 1-like
CEP152	441	325	392	328	338	344	centrosomal protein 135kDa
STAMBPL1	371	350	390	347	487	344	STAM binding protein-like 1
ZBTB40	366	327	363	347	326	344	zinc finger and BTB domain containing 40
FAM222B	452	366	393	325	399	344	family with sequence similarity 222, member A
DBF4B	341	307	301	267	317	344	DBF4 zinc finger
OMA1	388	332	404	333	341	344	OMA1 zinc metallopeptidase
LPCAT2	383	301	364	340	347	344	lysophosphatidylcholine acyltransferase 2
RBBP8	441	306	432	311	311	344	retinoblastoma binding protein 8
RUFY2	371	346	335	297	336	344	RUN and FYVE domain containing 2
ACOX3	317	296	369	278	271	344	acyl-CoA oxidase 3, pristanoyl

PDP2	378	311	361	319	286	344	pyruvate dehydrogenase phosphatase catalytic subunit 2
LOC104910046	132	272	278	263	194	344	uncharacterized LOC104910046
CCNT1	389	334	376	335	357	343	cyclin O
GEMIN4	423	291	363	266	305	343	gem (nuclear organelle) associated protein 2
ZNF518A	446	373	405	390	355	343	zinc finger protein 518A
LOC104914600							
VCPIP1	343	314	305	430	409	343	voltage-dependent L-type calcium channel subunit beta-1-like
	409	309	343	355	406	343	valosin containing protein (p97)/p47 complex interacting protein 1
LOC104911412	308	326	361	306	312	343	coiled-coil domain-containing protein 132
LOC104911310	422	283	358	353	313	343	SWI/SNF complex subunit SMARCC1-like
LOC104917484	379	336	342	306	301	343	pseudouridylate synthase 7 homolog
TADA1	382	323	296	301	318	343	transcriptional adaptor 1
GPR20	482	372	366	295	376	342	G protein-coupled receptor 19
LOC104910261	348	348	341	315	318	342	uncharacterized LOC104910261
MFSO5	410	339	351	269	340	342	major facilitator superfamily domain containing 5
LOC104914734	251	241	309	305	258	342	E3 ubiquitin-protein ligase NEDD4-like
APPL1							adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper containing 1
	375	300	351	380	343	342	zipper containing 1
LOC100541022	322	182	261	153	222	342	copine-3
FZR1	435	351	426	357	388	342	frizzled class receptor 9
LOC104914588	321	322	325	345	344	342	uncharacterized LOC104914588
FGF7	556	288	501	302	306	341	fibroblast growth factor 6
LNK2	311	305	336	351	326	341	ligand of numb-protein X 1, E3 ubiquitin protein ligase
PLEKHG5							pleckstrin homology domain containing, family G (with RhoGef domain) member 5
	334	388	321	325	317	341	member 5
AFMID	356	284	324	256	325	341	arylformamidase
DUSP23	263	411	287	380	320	341	dual specificity phosphatase 22
PIGK	321	355	393	383	306	341	phosphatidylinositol glycan anchor biosynthesis, class K
DUS4L	315	317	321	271	253	341	dihydrouridine synthase 3-like (S. cerevisiae)
FAM173A	304	340	308	330	306	341	family with sequence similarity 172, member A
DHRS3	264	193	292	262	277	340	dehydrogenase/reductase (SDR family) member 13
FLAD1	422	322	361	321	407	340	fukutin
LOC100550279	547	807	434	817	312	340	fatty acid-binding protein, adipocyte-like
GDPD5							
	348	292	322	272	340	340	glycerophosphodiester phosphodiesterase domain containing 2
LOC104913126	378	349	338	338	370	340	zinc finger protein 384-like
ACOX2	201	257	182	323	258	340	acyl-CoA oxidase 2, branched chain
LOC104909250	337	306	329	300	294	340	paraspeckle component 1-like
DALRD3	326	375	378	363	315	340	dihydroxyacetone kinase 2 homolog (S. cerevisiae)
TRIM32	439	385	393	343	353	340	tripartite motif containing 32
DPCD							
	342	356	311	334	328	340	dolichyl-phosphate (UDP-N-acetylglucosamine) N-acetylglucosaminophosphotransferase 1 (GlcNAc-1-P transferase)
DPH5	399	302	422	311	321	340	diphthamide biosynthesis 3
ATP2A3	385	464	391	409	416	339	ATPase, Ca++ transporting, ubiquitous
ARSB	198	250	264	253	236	339	arylsulfatase B
CDC42SE2	453	304	415	281	288	339	CDC42 small effector 1
SEN8	461	288	345	301	375	339	SUMO/sentrin specific peptidase family member 8
LOC104909330	389	351	399	293	288	339	centrosomal protein of 192 kDa-like
SETD1B	328	331	374	333	323	339	SET domain containing 1B
TRADD	405	313	396	345	385	339	TNFRSF1A-associated via death domain
ITGB1BP1							integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29)
	405	341	392	341	343	339	includes MDF2, MSK12)
EXOSC3	444	357	419	318	371	339	exosome component 2
GPR89B	364	302	376	297	311	339	G protein-coupled receptor 87
IRS2	398	281	443	366	208	339	insulin receptor substrate 1
LOC104910407	1080	573	934	777	1342	339	uncharacterized LOC104910407
LOC100545816	727	301	496	381	502	339	E3 ubiquitin-protein ligase TRIM33-like
IMPACT	386	286	362	292	285	339	inositol(myo)-1(or 4)-monophosphatase 2
PGAP3	333	324	311	279	293	339	post-GPI attachment to proteins 3
LOC104917422	331	367	358	324	298	338	propionyl-CoA carboxylase alpha chain, mitochondrial-like
LOC104911953	293	284	315	283	311	338	uncharacterized LOC104911953
LOC104916276	410	358	410	352	358	338	neurabin-2-like
TSP0	389	357	369	316	357	338	translocator protein (18kDa)
TMED8							
	451	317	376	332	384	338	transmembrane emp24 protein transport domain containing 8
SPON1	474	313	446	338	406	338	spondin 1, extracellular matrix protein
LOC104913510	333	337	294	314	288	338	uncharacterized LOC104913510
TAF11							TAF11 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 28kDa
	399	358	345	331	355	338	factor, 28kDa
LOC104912984	358	336	369	288	363	338	RNA-binding Raly-like protein
DPM2	379	383	377	327	324	338	diphthamide biosynthesis 7
LOC104911054	317	343	309	368	339	338	uncharacterized LOC104911054
PRDM15	360	321	349	318	308	338	PR domain containing 15
PIGB	502	347	443	359	307	337	phosphatidylinositol glycan anchor biosynthesis, class B
LOC100540082	314	278	304	285	319	337	AP-3 complex subunit sigma-2
C30H19orf60	400	370	405	349	433	337	chromosome 30 open reading frame, human C19orf45
LOC104917402	632	380	544	318	389	337	uncharacterized LOC104917402

BIRC6	360	358	327	471	362	337	baculoviral IAP repeat containing 6
ZNF217	384	287	413	350	319	337	zinc finger protein 217
DCAF5	409	388	389	382	359	337	DDB1 and CUL4 associated factor 4
SP2	380	311	374	310	314	337	Sp2 transcription factor
LOC104916886	533	467	384	340	258	337	tubulin alpha chain-like
PIN4	397	381	343	311	324	337	protein (peptidylprolyl cis/trans isomerase) NIMA-interacting, 4 (parvulin)
HYI	319	383	318	347	352	337	HYDIN, axonemal central pair apparatus protein
DFNB59	276	400	279	314	322	336	deafness, autosomal recessive 31
TP53RK	344	325	354	271	315	336	TP53 regulating kinase
ENPP4	342	369	323	325	337	336	ectonucleotide pyrophosphatase/phosphodiesterase 3
GPR124	432	377	425	397	345	336	G protein-coupled receptor 123
LOC100547363	288	295	326	417	304	336	interleukin-17F-like
DUSP26	344	552	299	311	211	336	dual specificity phosphatase 23
PER3	339	514	358	287	340	335	period circadian clock 3
CA4	339	362	360	344	378	335	carbonic anhydrase XIV
LOC100545705	312	295	320	327	277	335	cytoplasmic dynein 1 light intermediate chain 2-like
SLC22A4	591	255	509	273	469	335	solute carrier family 22 (organic cation/zwitterion transporter), member 4
ARHGEF37	222	237	292	302	268	334	Rho guanine nucleotide exchange factor (GEF) 37
KIF7	434	358	453	349	349	334	kinesin family member 5C
LOC100540176	377	381	383	321	366	334	C-C chemokine receptor type 5-like
IFT81	340	344	321	346	245	334	intraflagellar transport 80
NAPRT	375	355	352	326	321	334	nicotinate phosphoribosyltransferase
LOC100540238	196	249	194	410	192	334	GTPase IMAP family member 6-like
ENDOV	357	373	351	321	342	334	endonuclease, polyU-specific
HSPBAP1	406	277	378	303	339	334	heat shock 22kDa protein 8
LOC104911397	377	286	340	309	342	333	cullin-2-like
LOC104917585	396	307	363	342	319	333	transcription factor SPT20 homolog
KATNB1	433	353	396	325	402	333	katanin p60 subunit A-like 2
PEX2	281	270	280	302	281	333	peroxisomal biogenesis factor 2
TCP11L1	353	316	383	364	355	333	t-complex 11, testis-specific-like 1
PHLDA1	561	301	471	273	412	332	pleckstrin homology-like domain, family A, member 1
ZCCHC4	372	333	367	331	305	332	zinc finger, CCHC domain containing 4
MFS10	349	324	333	316	328	332	major facilitator superfamily domain containing 10
RASSF1	402	342	402	290	407	332	Ras association (RalGDS/AF-6) domain family member 1
DNAL4	302	285	341	297	303	332	dynein, axonemal, light chain 1
LOC100547239	369	311	356	365	275	332	histidine-tRNA ligase, cytoplasmic-like
PCTP	227	364	288	330	409	332	phosphatidylcholine transfer protein
LOC100551294	323	261	326	299	297	332	transmembrane protein 135
LOC100548949	322	369	334	328	313	332	collagen alpha-1(XII) chain
DDX55	408	298	387	273	315	332	DEAD (Asp-Glu-Ala-Asp) box polypeptide 54
MED4	366	319	303	266	251	331	mediator complex subunit 4
CCP110	371	267	369	333	331	331	cyclin Y-like 1
LOC104913907	372	294	420	368	341	331	uncharacterized LOC104913907
NAAA	279	294	297	391	294	331	N-acylethanolamine acid amidase
GCLM	413	271	378	307	321	331	glutamate-cysteine ligase, catalytic subunit
ZBTB25	352	289	364	294	368	331	zinc finger and BTB domain containing 25
DNASE2B	320	279	377	300	393	331	deoxyribonuclease I-like 3
TMEM199	309	335	326	300	293	331	transmembrane protein 199
GPR75	389	372	315	289	322	331	G protein-coupled receptor 68
LMF1	452	350	408	330	360	331	LIM and cysteine-rich domains 1
FUT10	305	302	306	295	248	331	FUN14 domain containing 2
CDC42EP4	531	390	469	307	373	331	CDC42 effector protein (Rho GTPase binding) 3
LOC104915558	318	282	325	321	282	331	vacuolar protein sorting-associated protein 11 homolog
LOC104915214	357	265	360	303	296	331	uncharacterized LOC104915214
LOC104910316	360	282	343	329	318	331	DNA-dependent protein kinase catalytic subunit-like
LOC104909920	431	353	424	270	390	331	collagen alpha-1(XII) chain-like
LOC104915941	364	290	311	230	255	331	suppressor of SWI4 1 homolog
TTC32	355	354	365	288	292	331	tetratricopeptide repeat domain 32
DIRC2	375	334	375	367	418	330	DIRAS family, GTP-binding RAS-like 1
PRPSAP1	421	358	395	347	390	330	phosphoribosyl pyrophosphate synthetase-associated protein 1
LOC104917160	392	345	371	339	351	330	tripartite motif containing 28
LOC104911131	320	326	340	327	318	330	uncharacterized LOC104911131
FBXO39	251	354	255	333	499	330	F-box protein 38
LOC100547402	453	309	409	292	354	330	C-type lectin domain family 2 member B-like
FECH	407	240	384	319	332	330	ferredoxin reductase
PRIMPOL	372	256	406	252	294	330	primase and polymerase (DNA-directed)
LOC100545091	403	427	378	354	337	329	lipocalin-like
GRAMD2	230	404	273	341	377	329	GRAM domain containing 1C
SNX33	395	344	376	326	375	329	sorting nexin 33
LOC100540575	368	285	332	284	334	329	olfactory receptor 14I1-like
ZBTB8A	387	342	378	309	361	329	zinc finger and BTB domain containing 8A
PRKAR1B	324	302	324	282	270	329	protein kinase, cAMP-dependent, regulatory, type I, beta
PIBF1	435	294	378	254	286	329	progesterone immunomodulatory binding factor 1
SMARCA1	404	319	371	325	286	329	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a-like 1
LOC100548115	365	242	381	288	248	329	multidrug and toxin extrusion protein 2-like

FAR2	429	276	375	311	333	329	Fanconi anemia, complementation group M
NSMF	359	367	341	336	339	329	NMDA receptor synaptonuclear signaling and neuronal migration factor
LOC104910970	338	317	339	287	324	329	DNA-binding protein SMUBP-2-like
LOC104909279	236	405	236	422	229	329	pancreatic alpha-amylase-like
LOC104916197	904	677	495	580	684	329	calponin-1-like
TF	368	395	414	513	415	329	transferrin
LOC100549531	332	297	310	356	307	329	lipoma-preferred partner homolog
LOC100544072	404	319	403	306	322	328	hormonally up-regulated neu tumor-associated kinase-like
TMEM64	390	306	389	300	389	328	transmembrane protein 64
RILP	249	340	295	398	277	328	Rab interacting lysosomal protein
LOC100549146	329	352	300	332	333	328	heat shock protein beta-11-like
AGPAT4	628	729	537	665	416	328	1-acylglycerol-3-phosphate O-acyltransferase 4
FUK	340	345	321	328	339	328	fucosidase, alpha-L- 2, plasma
ANK3	244	345	320	396	365	328	ankyrin 3, node of Ranvier (ankyrin G)
GADD45G	405	301	462	277	299	328	growth arrest and DNA-damage-inducible, alpha
LOC104917020	253	280	285	343	504	328	6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase-like
BMPER	488	312	511	264	246	327	BMP binding endothelial regulator
CDYL2	291	276	291	311	279	327	chromodomain protein, Y-like
PKD3	251	339	277	396	325	327	pyruvate dehydrogenase kinase, isozyme 3
LOC100551066	452	357	380	383	395	327	furin
SCP2D1	317	220	302	244	282	327	SCP2 sterol-binding domain containing 1
ITM2C	385	279	405	281	436	327	integral membrane protein 2B
HMG20B	467	362	375	296	331	326	high mobility group 20A
MPP1	489	271	342	306	406	326	membrane protein, palmitoylated 1, 55kDa
LOC100540665	273	248	336	287	245	326	diacylglycerol O-acyltransferase 2-like
ADAMTS7	410	434	433	410	408	326	ADAM metalloproteinase with thrombospondin type 1 motif, 7
BPHL	304	340	302	338	289	326	biphenyl hydrolase-like (serine hydrolase)
LOC104916937	292	370	330	404	362	326	autophagy-related protein 101-like
PKNOX1	335	263	289	281	280	326	PBX/knotted 1 homeobox 1
CDKN1A	860	442	548	465	924	326	cyclin-dependent kinase-like 5
FAT4	435	377	552	317	285	326	FAT atypical cadherin 2
LOC100544199	355	283	344	290	336	325	myosin heavy chain, skeletal muscle, adult
SLC38A3	498	482	474	414	314	325	solute carrier family 38, member 3
AMMECR1	409	285	368	332	336	325	Alport syndrome, mental retardation, midface hypoplasia and elliptocytosis chromosomal region gene 1
DMTF1	359	327	355	366	332	325	DMRT-like family B with proline-rich C-terminal, 1
OSGEP1	328	329	286	320	294	325	O-sialoglycoprotein endopeptidase-like 1
ST8SIA4	426	304	449	326	405	325	ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 4
LOC104917322	197	257	269	552	200	325	CCAAT/enhancer-binding protein delta-like
LOC100540047	309	291	290	299	262	325	ATP-dependent RNA helicase DDX19B
CHEK1	381	336	334	214	238	325	choline dehydrogenase
LOC100546494	377	244	334	268	359	324	teneurin-3-like
SIX2	379	349	342	354	457	324	SIX homeobox 2
PARP6	355	362	332	318	380	324	poly (ADP-ribose) polymerase family, member 6
FAM188A	319	264	321	266	242	324	family with sequence similarity 185, member A
EIF2AK3	300	281	347	312	263	324	eukaryotic translation initiation factor 2-alpha kinase 1
KDM7A	306	276	332	349	412	324	lysine (K)-specific demethylase 5B
LOC104912446	384	326	390	380	325	324	zinc finger CCHC-type containing 11
CNNM4	379	316	347	299	322	324	cyclin and CBS domain divalent metal cation transport mediator 2
VANGL1	403	326	338	331	453	324	VANGL planar cell polarity protein 1
LOC100545121	319	321	268	297	267	323	ES1 protein homolog, mitochondrial-like
SH3TC1	270	263	291	345	268	323	SH3 domain and tetratricopeptide repeats 1
RBM43	308	336	326	353	290	323	RNA binding motif protein 43
ZNRF3	401	339	359	289	333	323	zinc and ring finger 3
LOC104909517	452	299	332	263	377	323	uncharacterized LOC104909517
OSR2	396	368	305	344	341	323	odd-skipped related transcription factor 2
LOC104917218	386	359	343	338	298	323	sperm acrosome associated 6
LOC104916112	391	277	318	297	399	323	inositol-3-phosphate synthase 1-A-like
LRRCC1	370	275	354	276	290	323	leucine rich repeat and coiled-coil centrosomal protein 1
FBXL7	330	279	371	270	304	323	F-box and leucine-rich repeat protein 5
LOC100540769	274	218	295	257	258	323	E3 ubiquitin-protein ligase TRIM39-like
APMAP	364	296	323	272	300	322	adipocyte plasma membrane associated protein
SLC9A3R1	404	273	375	242	307	322	solute carrier family 9, subfamily A (NHE3, cation proton antiporter 3), member 3 regulator 1
LOC104910686	389	252	345	292	320	322	anthrax toxin receptor 2-like
LEMD3	408	352	379	348	309	322	LEM domain containing 2
ENTPD5	321	303	292	325	283	322	ectonucleoside triphosphate diphosphohydrolase 4
POC5	332	227	365	271	255	322	POC5 centriolar protein
RAD54B	424	258	425	228	263	322	RAD54 homolog B (S. cerevisiae)
HGH1	271	335	269	285	242	322	hepatocyte growth factor (hepatopoietin A; scatter factor)
MAR4	395	334	342	309	404	322	membrane-associated ring finger (C3HC4) 4, E3 ubiquitin protein ligase
PIWIL1	230	319	310	372	362	322	piwi-like RNA-mediated gene silencing 1
NQO1	307	392	325	359	374	322	NAD(P)H dehydrogenase, quinone 1

COMMD8	351	300	362	290	338	322	COMM domain containing 7
CMPK1	357	259	318	273	309	322	chemokine-like receptor 1
LOC104911838							
	262	365	250	409	251	322	von Willebrand factor D and EGF domain-containing protein-like
CRBN	262	244	299	334	344	322	crumbs family member 2
PRKRIR							protein-kinase, interferon-inducible double stranded RNA dependent
	463	327	433	331	366	322	inhibitor, repressor of (P58 repressor)
SOCS4	314	300	338	326	320	321	suppressor of cytokine signaling 4
SLC35A1							
	372	297	372	296	329	321	solute carrier family 35 (CMP-sialic acid transporter), member A1
LOC104917168	387	337	352	332	343	321	cullin-9-like
PINX1	315	284	312	311	272	321	PIN2/TERF1 interacting, telomerase inhibitor 1
AGAP3							
	424	337	362	307	320	321	ArfGAP with GTPase domain, ankyrin repeat and PH domain 3
ETNK2	335	258	327	247	350	321	ethanolamine kinase 1
LOC104909267	391	305	349	300	321	321	leucine-rich repeat-containing protein 40-like
PAOX	557	364	492	332	447	321	polyamine oxidase (exo-N4-amino)
LOC100541180	396	282	334	239	358	321	thrombospondin-4
C16H7orf50	398	239	340	241	264	320	chromosome 16 open reading frame, human C7orf26
TRIM71	611	342	561	187	375	320	tripartite motif containing 71, E3 ubiquitin protein ligase
C1H21orf91	373	315	349	350	301	320	chromosome 1 open reading frame, human C21orf62
WWC3	374	353	364	344	329	320	WWC family member 3
LOC104915992	371	226	318	255	360	320	DNA-directed RNA polymerase II subunit RPB1
NAGPA							
	338	347	330	304	326	320	N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase
ZNF511	255	325	235	271	260	320	zinc finger protein 511
LOC100548334	257	305	301	322	316	320	elongator complex protein 2-like
ZBTB7A	401	369	366	344	437	320	zinc finger and BTB domain containing 7A
ELMO1	335	309	360	316	279	319	elongation factor, RNA polymerase II, 2
LOXL2	363	264	375	424	424	319	lysyl oxidase-like 2
GFR2	407	234	369	265	286	319	glutamine-fructose-6-phosphate transaminase 2
ZFYVE26	298	274	353	380	335	319	zinc finger, FYVE domain containing 26
ALX4	504	324	363	320	291	318	ALX homeobox 4
MAPK14	397	334	363	350	329	318	mitogen-activated protein kinase 14
PIGW	313	296	268	246	267	318	phosphatidylinositol glycan anchor biosynthesis, class W
MYO19	366	328	344	297	380	318	myosin XIX
LOC104917527	390	342	397	273	355	318	von Willebrand factor A domain-containing protein 8-like
MFSO6	368	313	376	278	344	318	major facilitator superfamily domain containing 6
ITGA9	382	352	376	404	336	318	integrin, alpha 7
MIS18A	376	271	337	252	286	318	MIS18 kinetochore protein A
MAN1C1	324	310	380	352	334	318	mannosidase, alpha, class 1C, member 1
BTD	311	356	294	313	280	318	betacellulin
LOC104910917	358	248	334	295	315	318	DNA-directed RNA polymerase I subunit RPA1-like
LOC104913624	319	411	274	244	261	318	zinc finger protein RFP-like
CLSPN	397	265	339	232	282	317	clarin 3
SMYD4	362	313	358	304	341	317	SET and MYND domain containing 4
FAM120B	280	268	279	286	221	317	family with sequence similarity 120A
RND3	462	328	414	343	410	317	Rho family GTPase 3
SORBS2	331	382	352	351	334	317	sorbin and SH3 domain containing 2
CDH2	640	314	508	249	286	317	cadherin 18, type 2
STK10	477	356	388	331	436	317	serine/threonine kinase 10
ACSL6	202	139	191	239	433	317	acyl-CoA synthetase long-chain family member 6
PID1	340	353	363	301	277	317	phosphotyrosine interaction domain containing 1
TPMT	322	323	313	340	344	317	thiopurine S-methyltransferase
MFHAS1	514	368	437	393	439	317	malignant fibrous histiocytoma amplified sequence 1
LOC104911358	351	319	325	265	229	316	serine/threonine-protein kinase greatwall-like
LOC104915960	305	313	276	270	298	316	acyl-coenzyme A thioesterase THEM4-like
PITX2	372	365	365	265	182	316	paired-like homeodomain 2
ABL2	373	306	371	352	319	316	ABL proto-oncogene 2, non-receptor tyrosine kinase
EXD3	321	298	335	314	334	316	exonuclease 3'-5' domain containing 2
HHAT	324	354	379	287	367	316	heparan-alpha-glucosaminide N-acetyltransferase
ZNF276	331	290	324	286	298	316	zinc finger protein 276
BAK1	420	262	367	274	312	316	BCL2-antagonist/killer 1
LOC100550056	277	293	310	299	352	316	uncharacterized LOC100550050
NCKIPSD	340	327	343	293	301	316	NCK interacting protein with SH3 domain
LOC100550448	269	415	302	489	350	316	dimethylaniline monooxygenase [N-oxide-forming] 3-like
ROGDI	319	277	286	243	225	315	rogdi homolog (Drosophila)
LOC100549177							phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit beta
	274	327	275	305	230	315	isoform
RIPK1	414	313	420	299	329	315	receptor (TNFRSF)-interacting serine-threonine kinase 1
LOC100546382	394	289	465	279	263	315	N-alpha-acetyltransferase 35, NatC auxiliary subunit
LOC104913104	396	356	335	342	303	315	atrophin-1-like
LOC100545985	338	310	337	386	310	315	serine/threonine-protein kinase MRCK alpha
GNA13	353	314	315	342	307	315	guanine nucleotide binding protein (G protein) alpha 12
LOC100540331	388	264	418	337	300	315	KDEL motif-containing protein 1-like
OXNAD1	331	260	321	227	265	315	oxidoreductase NAD-binding domain containing 1
HLF							holocarboxylase synthetase (biotin-(propionyl-CoA-carboxylase (ATP-hydrolysing)) ligase)
	321	308	320	303	273	315	uncharacterized LOC104916859
LOC104916859	264	251	367	241	237	315	

LOC100543009	381	317	318	317	332	315	gamma-aminobutyric acid (GABA) A receptor, theta
PCSK6	243	356	246	284	258	315	proprotein convertase subtilisin/kexin type 6
LOC104911578	127	506	227	480	233	315	uncharacterized LOC104911578
H6PD	289	280	321	380	277	315	H3 histone, family 3B (H3.3B)
C8H10orf12	285	279	268	275	273	315	chromosome 8 open reading frame, human C10orf11
ACSL3	331	246	305	224	326	315	acyl-CoA synthetase long-chain family member 3
DLL1	352	358	379	292	280	315	delta-like 2 homolog (Drosophila)
ZNF1	347	306	370	369	315	315	zinc finger, NFX1-type containing 1
LOC104909494	340	299	348	296	366	315	uncharacterized LOC104909494
ADAMTS17							
	419	362	393	316	330	314	ADAM metallopeptidase with thrombospondin type 1 motif, 17
SNAPIN	313	361	315	285	335	314	SNAP-associated protein
PFKP	474	251	396	290	339	314	phosphofructokinase, platelet
PASK	258	280	251	252	185	314	PAS domain containing serine/threonine kinase
LUZP1	433	294	362	297	335	314	leucine zipper protein 1
ST7	370	391	341	351	378	314	suppression of tumorigenicity 7
LOC100540339	257	226	310	271	245	314	myomegalin
DMXL2	330	255	310	406	329	314	cyclin D binding myb-like transcription factor 1
FLT4	497	350	466	389	477	313	fms-related tyrosine kinase 3
CEP89	378	266	336	272	270	313	centrosomal protein 85kDa
LOC104914402	266	258	303	341	275	313	uncharacterized LOC104914402
MPHOSPH9	336	286	337	290	253	313	M-phase phosphoprotein 9
ZC3H3	360	356	370	334	322	313	zinc finger CCCH-type containing 3
LOC104909304	427	291	391	261	303	313	rab GTPase-activating protein 1-like
CNTD1	390	295	315	239	343	313	consortin, connexin sorting protein
TRAF3	402	299	347	298	312	313	TNF receptor-associated factor 3
LOC100539820	387	273	386	296	319	313	cytochrome b reductase 1
LOC104910399	297	228	305	245	332	313	OTU domain-containing protein 6B-like
RBPMS	606	360	447	378	591	313	RNA binding protein with multiple splicing
SEN2	345	309	339	287	303	313	SUMO1/sentrin/SMT3 specific peptidase 2
MYCT1	380	309	355	289	365	313	myc target 1
TMEM104	431	301	366	293	350	312	transmembrane protein 104
ASAP1	456	286	400	320	366	312	ArfGAP with SH3 domain, ankyrin repeat and PH domain 1
STXB3	410	324	400	326	362	312	syntaxin binding protein 3
ITGB5	363	333	392	399	355	312	integrin, beta 4
PTPDC1	317	294	316	262	287	312	protein tyrosine phosphatase domain containing 1
WDR86	358	285	351	291	326	312	WD repeat domain 86
ICOSLG	354	222	354	300	315	312	inducible T-cell co-stimulator
TCTN2	353	306	350	283	304	312	tectonic family member 2
ABCC10							
	288	290	299	283	295	312	ATP-binding cassette, sub-family C (CFTR/MRP), member 10
PURG	364	288	337	305	318	311	purine-rich element binding protein G
NRDE2							
	296	266	309	276	317	311	NRDE-2, necessary for RNA interference, domain containing
LOC104912087	358	295	365	306	304	311	WD repeat-containing protein 11
CCDC170	216	290	214	342	128	311	coiled-coil domain containing 17
SOX10	347	395	292	276	249	311	SRY (sex determining region Y)-box 10
LOC100541042	283	313	354	343	260	311	zinc finger protein 407
FANCE	398	321	340	255	257	311	Fanconi anemia, complementation group D2
LOC104912314	540	304	516	342	382	311	zinc finger and BTB domain-containing protein 41
RICTOR	282	265	311	351	246	311	RPTOR independent companion of MTOR, complex 2
PRG4	344	314	346	251	282	311	proteoglycan 4
DDX59	381	313	398	312	378	311	DEAD (Asp-Glu-Ala-Asp) box polypeptide 55
LOC100550216	375	246	380	262	314	311	serine/threonine-protein kinase 4-like
TMEM175	262	265	301	313	241	311	transmembrane protein 175
CERS2	426	366	360	330	302	311	ceramide synthase 1
ZCCHC17	320	295	304	239	290	310	zinc finger, CCHC domain containing 17
LOC104910232	304	285	280	273	270	310	zinc finger protein 407-like
LOC100546568	408	376	398	364	422	310	transforming acidic coiled-coil-containing protein 3-like
TTC9	444	291	428	319	413	310	tetratricopeptide repeat domain 9
WRB	255	243	311	251	235	310	tryptophan rich basic protein
FAM193B	406	339	346	317	351	310	family with sequence similarity 193, member A
TMEM209	377	296	351	291	293	310	transmembrane protein 209
LOC100549557	341	279	330	288	296	310	histone H2B 5-like
LOC104910766	229	261	250	324	315	310	myotubularin-related protein 7-like
HACL1							
	300	343	254	280	285	310	HECT domain and ankyrin repeat containing E3 ubiquitin protein ligase 1
ZDHC15	395	339	361	327	331	310	zinc finger, DHHC-type containing 15
WDR89	360	302	345	293	337	310	WD repeat domain 89
TELO2	443	302	352	284	330	310	telomere maintenance 2
WDR76	422	322	302	236	260	309	WD repeat domain 76
SHPK	314	333	364	304	332	309	sedoheptulokinase
CCSAP	280	427	214	335	280	309	CCR4 carbon catabolite repression 4-like (S. cerevisiae)
C3H8orf22	246	831	403	502	346	309	chromosome 3 open reading frame, human C7orf72
LOC104912132	357	359	345	331	328	309	transmembrane and TPR repeat-containing protein 1-like
LOC100539364	222	290	250	262	239	309	guanine nucleotide exchange factor VAV3
OTUD7B	323	365	306	299	336	309	OTU deubiquitinase 7B
SNAI1	309	220	357	247	217	309	snail family zinc finger 1
LOC104909989	322	270	309	330	319	309	kinase D-interacting substrate of 220 kDa-like

LOC104909297	316	288	304	297	374	309	macrophage mannose receptor 1-like
SKIV2L	336	301	334	348	313	308	superkiller viralicidic activity 2-like (S. cerevisiae)
LOC104909962	228	293	247	356	304	308	dystonin-like
PHF11	385	304	329	296	341	308	PHD finger protein 11
TMEM194A	446	299	373	255	305	308	transmembrane protein 194A
PVRL1							
	345	347	321	294	311	308	poliovirus receptor-related 1 (herpesvirus entry mediator C)
RNF4	344	252	349	294	360	308	ring finger protein 4
LOC104916339							
	392	363	303	307	282	308	small conductance calcium-activated potassium channel protein 1-like
LOC104910851	407	280	378	323	298	308	histone-lysine N-methyltransferase NSD2-like
FANCI	596	278	457	228	365	308	Fanconi anemia, complementation group G
CDK5	342	304	332	316	314	308	cyclin-dependent kinase 3
MAASP2	357	285	299	286	232	308	mannan-binding lectin serine peptidase 2
LOC104917316	323	290	307	288	413	308	homeobox protein SIX2
FANCC	266	259	293	271	233	308	Fanconi anemia, complementation group B
LOC104909807							
	345	365	371	325	305	307	leucine-rich repeats and immunoglobulin-like domains protein 3
LDB1	425	334	348	320	309	307	lactase
MIF4GD	328	255	317	235	281	307	MIF4G domain containing
TCF7L1	443	359	345	280	302	307	transcription factor 7-like 1 (T-cell specific, HMG-box)
DLL4	319	312	307	294	346	307	delta-like 1 (Drosophila)
COG8	369	297	354	300	352	307	component of oligomeric golgi complex 7
GPR161	334	289	353	284	304	307	G protein-coupled receptor 160
CCDC66	353	247	327	283	277	307	coiled-coil domain containing 65
SLC7A6OS	384	279	382	293	347	307	solute carrier family 7, member 6 opposite strand
KCTD6	457	341	389	290	394	306	potassium channel tetramerization domain containing 4
PICK1	400	309	335	273	305	306	protein interacting with PRKA 1
LOC104917577	347	355	310	302	291	306	vascular endothelial growth factor receptor 1-like
ELL2	323	292	340	261	277	306	elongation factor RNA polymerase II
LOC104916888	383	267	374	293	360	306	ribosome biogenesis protein bop1-like
LOC104910870	232	252	236	274	222	306	protein Dok-7-like
UCK1	360	336	308	304	339	306	uridine-cytidine kinase 1
LOC104910682	312	336	350	318	271	306	tyrosine-protein phosphatase non-receptor type 13-like
LOC100546696	313	249	315	283	309	306	transducin-like enhancer protein 1
SEMA3G							sema domain, immunoglobulin domain (Ig), short basic domain,
	339	391	330	318	341	306	secreted, (semaphorin) 3G
LOC104911011	380	416	326	390	298	306	uncharacterized LOC104911011
RCCD1	284	334	241	298	303	306	RCC1 domain containing 1
DHX57	425	301	386	322	371	306	DEAH (Asp-Glu-Ala-His) box polypeptide 40
LOC104916642	409	315	390	335	368	306	paladin-like
LOC104911485	269	246	341	192	283	306	uncharacterized LOC104911485
CDC25A	401	277	317	215	258	306	cell division cycle 23
PGAP1	365	293	346	344	333	305	post-GPI attachment to proteins 1
LOC104917135	304	238	266	218	270	305	gem-associated protein 8-like
LOC104915873	239	240	248	277	265	305	uncharacterized LOC104915873
LOC100538845	323	290	344	291	295	305	inactive dipeptidyl peptidase 10
LOC104909612	288	283	301	242	252	305	uncharacterized LOC104909612
LOC100549446	379	372	338	341	348	305	feather keratin 1-like
ZNF346	316	284	297	317	315	305	zinc finger protein 346
LSM8							
	373	353	365	289	292	305	LSM8 homolog, U6 small nuclear RNA associated (S. cerevisiae)
CEP55	422	271	394	270	281	304	centrosomal protein 44kDa
SRPX2	319	333	365	268	368	304	sushi-repeat containing protein, X-linked 2
PLN	542	1255	529	1012	515	304	phospholamban
ZNF319	396	318	333	267	332	304	zinc finger protein 319
ALKBH8	311	313	283	317	256	304	alkB, alkylation repair homolog 8 (E. coli)
LOC100543835	316	325	308	415	280	304	methyltransferase-like protein 10
LOC100540622	363	293	361	248	385	304	uncharacterized LOC100540620
SLC30A1	342	249	324	308	286	304	solute carrier family 30 (zinc transporter), member 1
GIT1	361	349	343	370	349	303	GIPC PDZ domain containing family, member 3
LOC100548307	330	266	312	323	298	303	cytochrome b-c1 complex subunit 8
LOC100542006	360	281	337	286	274	303	CWF19-like protein 2
LOC104911515	268	228	302	268	286	303	uncharacterized LOC104911515
GLCC1	376	314	384	296	307	303	galactosidase, beta 1-like
MFF	264	255	268	289	244	303	mitochondrial fission factor
XRCC2							
	272	297	301	286	288	303	X-ray repair complementing defective repair in Chinese hamster cells 2
BCL6	338	262	320	386	326	303	B-cell CLL/lymphoma 6
DYNLL1	300	293	285	272	228	303	dynein, cytoplasmic 2, light intermediate chain 1
DNM1	352	265	342	295	334	302	DND microRNA-mediated repression inhibitor 1
LRRC8B	399	232	349	264	301	302	leucine rich repeat containing 8 family, member B
LOC104910858	334	233	295	236	289	302	uncharacterized LOC104910858
LOC100539335	380	248	356	274	251	302	nucleoside diphosphate kinase 6-like
FBXL14	436	313	349	258	284	302	F-box and leucine-rich repeat protein 13
LOC104913218	356	357	309	324	330	302	uncharacterized LOC104913218
ELP4	252	234	288	234	244	302	elongator acetyltransferase complex subunit 3
METRNL	301	237	281	227	310	302	meteorin, glial cell differentiation regulator
CPEB1	405	248	348	230	310	302	carboxypeptidase E

IFT172	274	304	281	327	306	302	intraflagellar transport 140
B4GALNT3	200	324	237	286	207	302	beta-1,4-N-acetyl-galactosaminyl transferase 3
TSEN2	287	231	283	256	266	301	TSEN2 tRNA splicing endonuclease subunit
TTC39A	340	306	333	298	304	301	tetratricopeptide repeat domain 39A
TTI1	313	311	322	327	315	301	TELO2 interacting protein 1
LOC104912413	269	218	229	267	464	301	interleukin-23 receptor-like
ANKRD16	379	277	387	278	310	301	ankyrin repeat domain 16
PRKD1	351	301	374	324	289	301	protein kinase D1
ALAD	410	298	329	287	324	301	aminolevulinate dehydratase
FGD6	348	285	360	331	309	301	FYVE, RhoGEF and PH domain containing 5
ASB10	217	337	275	274	339	301	ankyrin repeat and SOCS box containing 10
C11H3orf70	368	293	374	277	365	300	chromosome 11 open reading frame, human C3orf58
LOC100547091	194	236	267	332	242	300	C-type lectin domain family 18 member A-like
LOC100540496	404	276	303	292	327	300	tau-tubulin kinase 1-like
LOC104916255	392	277	334	258	317	300	evolutionarily conserved signaling intermediate in Toll pathway, mitochondrial-like
KCNH2	328	293	271	348	357	300	potassium voltage-gated channel, subfamily H (eag-related), member 1
HABP4	269	276	309	266	280	300	3-hydroxyanthranilate 3,4-dioxygenase
LOC104915810	380	341	383	371	357	300	SWI/SNF complex subunit SMARCC2-like
ATG12	268	293	318	267	251	300	autophagy related 12
POLL	322	298	319	278	339	300	polymerase (DNA directed), lambda
OSTM1	326	271	358	321	341	300	osteopetrosis associated transmembrane protein 1
LOC104913588	320	252	269	309	322	300	RING finger protein 10-like
CECR1	236	225	263	217	391	299	CCAAT/enhancer binding protein (C/EBP), zeta
PRKAB1	297	210	316	232	254	299	protein kinase, AMP-activated, beta 1 non-catalytic subunit
LOC104911003	247	320	288	387	310	299	microtubule associated monooxygenase, calponin and LIM domain containing 2
RNF166	335	305	330	292	375	299	ring finger protein 166
MIS12	352	234	310	208	208	299	MIS12 kinetochore complex component
OSBPL8	318	289	334	343	285	299	oxysterol binding protein-like 8
EXOSC4	344	286	313	276	303	299	exosome component 3
AASDH	286	254	266	288	267	299	aminoadipate-semialdehyde dehydrogenase
FOSL2	648	275	440	249	391	299	FGFR1OP N-terminal like
HRSP12	419	310	416	277	324	299	histamine receptor H3
NPB	303	241	246	218	242	299	neuropeptide B
ZC3H12B	352	294	336	311	320	299	zinc finger CCCH-type containing 12B
APITD1	332	270	295	210	200	299	apoptosis-inducing, TAF9-like domain 1
APLN	191	217	184	127	225	298	apelin
LOC100539654	382	234	349	224	334	298	hypocretin receptor 2
SYNE3	260	276	294	348	255	298	spectrin repeat containing, nuclear envelope family member 3
LOC104912048	302	283	282	307	300	298	PDZ domain-containing protein 8-like
TMEM150A	315	300	353	260	318	298	transmembrane protein 150A
C24H2orf42	301	309	311	298	310	298	chromosome 23 open reading frame, human C1orf86
AASDHPPPT	299	246	282	273	337	298	aminoadipate-semialdehyde dehydrogenase-phosphopantetheinyl transferase
LOC104913848	293	299	240	338	184	298	uncharacterized LOC104913848
FBXW8	329	311	328	307	340	298	F-box and WD repeat domain containing 7, E3 ubiquitin protein ligase
SMCO4	408	280	366	253	309	298	single-pass membrane protein with coiled-coil domains 4
GLI3	368	271	360	268	299	298	GLI family zinc finger 2
LOC104915550	294	231	301	235	243	298	mothers against decapentaplegic homolog 4-like
XRCC4	297	216	335	211	216	297	X-ray repair complementing defective repair in Chinese hamster cells 4
RGS9BP	386	287	348	230	262	297	regulator of G protein signaling 9 binding protein
LOC100543552	403	264	346	240	356	297	coiled-coil domain-containing protein 146
TYK2	357	280	361	278	294	297	tyrosine kinase 2
KIAA0513	327	273	345	281	340	297	KIAA0430 ortholog
DCX	305	247	313	307	295	297	DCN1, defective in cullin neddylation 1, domain containing 5
LOC100543078	285	245	303	247	239	297	atrial natriuretic peptide receptor 1-like
TBC1D22B	456	329	394	337	326	297	TBC1 domain family, member 22B
F2RL2	333	264	364	258	240	297	coagulation factor II (thrombin) receptor-like 1
MRPL43	310	305	304	273	285	297	mitochondrial ribosomal protein L43
GTPBP6	331	255	300	235	204	297	GTP binding protein 4
TMEM53	305	246	292	242	275	297	transmembrane protein 53
DLK1	254	248	259	294	250	297	discs, large (Drosophila) homolog-associated protein 5
AGPAT2	264	655	302	506	363	296	1-acylglycerol-3-phosphate O-acyltransferase 2
KIAA0586	315	225	396	276	304	296	KIAA0556 ortholog
CISD3	249	339	268	253	249	296	CDGSH iron sulfur domain 2
PRADC1	320	243	307	227	315	296	protease-associated domain containing 1
LOC104910551	318	218	341	219	310	296	uncharacterized LOC104910551
LOC104915062	261	261	303	234	247	296	gamma-secretase-activating protein-like
SMG5	448	317	358	346	345	296	SMG5 nonsense mediated mRNA decay factor
ENTPD4	282	268	258	260	227	296	ectonucleoside triphosphate diphosphohydrolase 3
LOC100539942	375	342	313	302	461	296	pumilio homolog 1
TRAF2	462	360	346	340	383	296	TNF receptor-associated factor 2
PSMG4	244	301	278	265	271	296	proteasome (prosome, macropain) assembly chaperone 4
LOC100548468	408	304	351	321	327	296	NAD(P) transhydrogenase, mitochondrial-like

NELL2	505	294	357	329	392	296	NEL-like 2 (chicken)
MTX3	314	266	319	256	266	295	metaxin 3
HUS1	379	304	368	293	319	295	hormonally up-regulated Neu-associated kinase
ATL1	356	283	349	259	334	295	atlastin GTPase 1
KANSL1	345	305	315	302	294	295	KN motif and ankyrin repeat domains 4
FANCG	323	266	302	242	212	295	Fanconi anemia, complementation group F
LOC104916864	339	221	406	177	247	295	serine hydroxymethyltransferase, mitochondrial-like
ACTR5	348	334	363	308	307	295	ARP5 actin-related protein 5 homolog (yeast)
PPP1R14D	234	245	274	239	258	295	protein phosphatase 1, regulatory (inhibitor) subunit 14D
WASF2	375	267	333	336	336	295	WAS protein family, member 2
LOC104912065	314	283	321	270	283	295	BRCA2 and CDKN1A-interacting protein-like
ADRB2	123	427	180	349	255	294	adrenoceptor beta 2, surface
PRKCE	317	317	335	303	279	294	protein kinase C, epsilon
VCAM1	509	391	377	364	301	294	vascular cell adhesion molecule 1
SLC6A6							
	271	209	277	369	291	294	solute carrier family 6 (neurotransmitter transporter), member 6
LOC100541195	374	288	344	279	306	294	neurobeachin-like
ACCS							1-aminocyclopropane-1-carboxylate synthase homolog
	349	293	303	272	336	294	(Arabidopsis)(non-functional)
GFPT2	346	366	306	279	301	294	glutamine--fructose-6-phosphate transaminase 1
SLC22A23	348	312	340	321	298	294	solute carrier family 22, member 23
GNB1L							
	351	310	336	296	307	294	guanine nucleotide binding protein (G protein), beta polypeptide 1
LOC104917078	255	250	255	201	164	294	zinc finger protein 774-like
LOC104909457	388	247	381	245	377	294	uncharacterized LOC104909457
LOC104912546	329	293	312	233	257	294	putative glycerol kinase 5
STX6	341	287	346	300	339	294	syntaxin 6
LOC100546358	402	291	360	273	307	294	prominin-1-A-like
LOC100540107	362	284	361	365	312	294	synapsin-3-like
LOC100550229	365	266	352	270	327	294	dynein heavy chain 8, axonemal-like
TNS4	395	297	364	273	298	294	tensin 4
GALNT16	375	298	337	316	303	293	polypeptide N-acetylglucosaminyltransferase 15
MEX3D	387	257	341	248	313	293	mex-3 RNA binding family member D
LOC100551422	236	270	227	284	210	293	ferric-chelate reductase 1
TTC7A	315	286	303	284	323	293	tetratricopeptide repeat domain 7A
EARS2	283	258	230	209	178	293	E2F-associated phosphoprotein
LOC100538468	309	319	314	298	319	293	steroid 21-hydroxylase
R3HDM4	301	297	301	311	296	293	R3H domain containing 4
LOC104916826	272	326	272	269	257	293	bone morphogenetic protein 1-like
ARL13B	292	272	276	277	251	292	ADP-ribosylation factor-like 13B
GAS6	263	314	278	283	262	292	growth arrest-specific 2 like 3
LOC104913552	314	304	335	264	300	292	DEP domain-containing protein 5-like
UBOX5	272	280	279	283	277	292	U-box domain containing 5
LOC100544196	338	225	295	245	262	292	lipase member M-like
PLXDC1	461	427	341	390	432	292	plexin domain containing 1
TMEM198	313	277	290	245	303	292	transmembrane protein 198
IL1RAP	353	341	378	305	261	292	interleukin 1 receptor, type II
PIGN	317	270	274	256	251	292	phosphatidylinositol glycan anchor biosynthesis, class N
GPCR5C	259	381	271	315	231	292	G protein-coupled receptor, class C, group 5, member B
SNRNP48	249	228	261	248	212	292	small nuclear ribonucleoprotein 48kDa (U11/U12)
SIL1	278	313	296	250	263	291	SIL1 nucleotide exchange factor
TMEM5	305	274	312	300	284	291	transmembrane protein 5
LOC100540368	343	269	330	333	295	291	amine oxidase [flavin-containing] A-like
PTGFRN	369	303	315	284	308	291	prostaglandin F2 receptor inhibitor
LOC104909875	336	260	326	232	281	291	activating signal cointegrator 1 complex subunit 3-like
CDK9	366	314	321	286	314	291	cyclin-dependent kinase 8
LOC104915548	299	260	292	278	316	290	E3 ubiquitin-protein ligase MIB2-like
DEPDC7	308	263	332	251	286	290	DEP domain containing 5
ALG13	297	254	292	247	284	290	ALG13, UDP-N-acetylglucosaminyltransferase subunit
EGFLAM	296	345	331	320	296	290	EGF-like-domain, multiple 7
LOC104914776	275	267	264	267	237	290	ciliary neurotrophic factor receptor subunit alpha
LOC100546474	322	278	326	263	279	290	ectonucleoside triphosphate diphosphohydrolase 8
LOC100541529	237	419	225	527	329	290	6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 4
TMEM119	303	400	353	295	301	289	transmembrane protein 119
LOC100543736	411	357	395	321	315	289	N-alpha-acetyltransferase 16, NatA auxiliary subunit-like
LOC104910744	218	246	231	247	235	289	uncharacterized LOC104910744
ID3							
	306	304	366	241	333	289	inhibitor of DNA binding 2, dominant negative helix-loop-helix protein
PDGFB	348	245	347	250	319	289	platelet-derived growth factor beta polypeptide
CMSS1							
	368	286	336	224	269	289	cytidine monophosphate (UMP-CMP) kinase 2, mitochondrial
KLHL3	330	494	325	358	296	289	kelch-like family member 29
DUSP11	344	282	317	260	279	288	dual specificity phosphatase 10
LOC104915260	228	178	238	209	189	288	arrestin domain-containing protein 3-like
LOC104913477	305	287	283	271	253	288	E3 ubiquitin-protein ligase MGRN1-like
LOC104913466							
	437	235	330	246	268	288	chitobiosyldiphosphodolichol beta-mannosyltransferase-like
ANAPC10	388	255	346	226	241	288	anaphase promoting complex subunit 10
MAX	382	315	321	306	297	288	MYC associated factor X

FAM102B	366	269	357	296	327	288	family with sequence similarity 102, member A
LOC104909326	345	383	374	352	366	288	calcium release activated channel regulator 2B
LOC104915743	335	241	310	297	282	288	dynamin-2
NSUN6	295	277	281	243	210	288	NOP2/Sun domain family, member 6
ALKBH4	357	297	338	247	286	288	alkB, alkylation repair homolog 4 (E. coli)
MGARP	185	257	124	199	185	288	mitochondria-localized glutamic acid-rich protein
LOC104911737	298	245	255	288	289	288	mitogen-activated protein kinase kinase kinase MLT-like
PAAF1	311	262	272	248	248	287	proteasomal ATPase-associated factor 1
LOC100542230	270	270	275	381	275	287	alpha-1-antitrypsin-like
ENHO	426	237	428	160	331	287	endo-beta-N-acetylglucosaminidase
PEX26	312	276	288	286	282	287	peroxisomal biogenesis factor 26
TBC1D7	277	230	282	219	249	287	TBC1 domain family, member 7
SLC24A1							solute carrier family 24 (sodium/potassium/calcium exchanger), member 1
	225	287	251	258	244	287	1
LOC104916962	295	335	280	377	306	287	synaptogyrin-2-like
LOC104915814	362	245	341	224	238	287	chromobox protein homolog 5-like
LOC100540676	301	316	314	278	257	287	solute carrier organic anion transporter family member 1C1
LOC104912766	292	283	295	241	251	287	E3 ubiquitin-protein ligase NEDD4-like
LOC100549463	204	301	209	245	185	287	lipoygenase homology domain-containing protein 1
ATP9B	342	280	354	285	322	287	ATPase, class II, type 9B
LOC100547610	332	267	315	222	249	286	acidic mammalian chitinase-like
NLK	332	256	307	268	327	286	nemo-like kinase
LOC100543018	332	287	294	287	341	286	NEDD4-like E3 ubiquitin-protein ligase WWP2
LOC104912195	333	291	343	263	313	286	BTB/POZ domain-containing protein KCTD12-like
LOC104909779	282	269	270	291	321	286	uncharacterized LOC104909779
LOC104914759							phospholipase A2 inhibitor and Ly6/PLAUR domain-containing protein-like
	271	239	283	267	245	285	like
AXIN1	361	338	352	309	307	285	axin 1
WDR35	340	299	326	308	297	285	WD repeat domain 35
CAPN5	336	277	288	242	267	285	calpain 3, (p94)
ST6GALNAC5							ST6 (alpha-N-acetyl-neuraminy-2,3-beta-galactosyl-1,3)-N-acetylglactosaminide alpha-2,6-sialyltransferase 5
	303	282	308	318	268	285	
LOC104915863	384	241	295	286	297	285	bromodomain-containing protein 4-like
TMEM9	305	193	229	232	179	285	transmembrane protein 9
KITLG							
	310	306	304	286	302	285	v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog
LOC104912785	299	253	339	268	280	285	little elongation complex subunit 2-like
NTHL1	353	298	258	255	252	285	nth endonuclease III-like 1 (E. coli)
LOC100539460	281	247	305	243	251	285	carbonic anhydrase 13-like
EPN3	502	286	430	281	328	285	epsin 2
SRA1	300	304	284	231	264	285	steroid receptor RNA activator 1
PTPRZ1							
	303	385	342	273	205	284	protein tyrosine phosphatase, receptor-type, Z polypeptide 1
VASN	401	314	347	223	321	284	vasorin
HELB	376	254	327	250	273	284	heart development protein with EGF-like domains 1
ARID3B	343	288	309	289	319	284	AT rich interactive domain 3B (BRIGHT-like)
LOC104913283	242	257	277	268	215	284	protein FAM13B-like
UBE2W	303	295	290	282	287	284	ubiquitin-conjugating enzyme E2W (putative)
PLEKHG3							pleckstrin homology domain containing, family G (with RhoGef domain)
	376	322	291	268	293	284	member 3
LOC100551043	263	292	290	357	285	284	ubiquitin carboxyl-terminal hydrolase 45-like
KATNAL2	236	254	263	234	184	284	katanin p60 subunit A-like 1
LAMTOR4							
	263	289	278	251	290	283	late endosomal/lysosomal adaptor, MAPK and MTOR activator 3
NIPSNAP1	247	316	254	269	215	283	nipsnap homolog 1 (C. elegans)
FGD3	339	271	361	310	320	283	fibrinogen beta chain
DGKQ	288	263	311	255	231	283	diacylglycerol kinase, kappa
LOC100546433	385	330	363	342	356	283	fibrinogen-like protein A
LOC104910451	285	262	225	200	230	283	interferon-induced guanylate-binding protein 1-like
HSPA13	312	280	272	263	287	283	heat shock 70kDa protein 12A
DBX1	419	367	327	392	356	283	dihydrolipoamide branched chain transacylase E2
MUC3A	3	92	65	239	46	283	mucin 3A, cell surface associated
NCOA2	255	290	299	394	242	282	nuclear receptor coactivator 2
LOC100544369	244	211	258	256	224	282	alpha-(1,3)-fucosyltransferase 6-like
LOC104909448	339	253	336	284	315	282	caseinolytic peptidase B protein homolog
PAIP2B	164	280	173	247	159	282	poly(A) binding protein interacting protein 2B
SKIL	357	323	330	295	309	282	SKI-like proto-oncogene
SFT2D2	283	307	252	287	235	282	SFT2 domain containing 2
LOC104915782	296	280	289	296	263	282	histone-lysine N-methyltransferase 2D-like
WIBG	307	262	293	233	291	282	within bgcn homolog (Drosophila)
LOC104916068	363	245	303	285	292	282	DNA-directed RNA polymerase II subunit RPB1-like
LOC100547676	334	257	313	267	308	281	phospholipid-transporting ATPase IB-like
MSI1	277	257	272	276	313	281	musashi RNA-binding protein 1
C7H2orf88	284	276	292	237	293	281	chromosome 7 open reading frame, human C2orf76
LOC100548734	384	342	314	278	260	281	uncharacterized LOC100548732
LOC104912957	300	245	281	300	300	281	chromodomain-helicase-DNA-binding protein 9-like
FAM57A	402	331	372	299	347	281	family with sequence similarity 53, member A
SLC18B1	357	251	304	233	267	281	solute carrier family 18, subfamily B, member 1
LOC104916263	312	308	315	258	273	281	F-box only protein 46-like

LOC104914729	344	236	342	271	315	281	asparagine--tRNA ligase, cytoplasmic-like
LOC104915307	245	248	290	239	211	281	E3 ubiquitin-protein ligase Topors-like
LOC104915763	317	286	343	281	294	281	trichohyalin-like
NEK8	263	256	308	307	307	280	NIMA-related kinase 8
LOC100539365							
	277	295	260	259	265	280	methylcrotonoyl-CoA carboxylase beta chain, mitochondrial-like
KIAA1147	287	265	304	282	290	280	KIAA1143 ortholog
SLC2A10							
	302	265	302	252	256	280	solute carrier family 2 (facilitated glucose transporter), member 10
SIAH2	303	265	329	222	273	280	siah E3 ubiquitin protein ligase 2
TMEM80	268	262	270	192	239	280	transmembrane protein 80
PARP12	317	242	320	278	281	280	poly (ADP-ribose) polymerase family, member 12
WBSR16	319	250	269	243	266	280	Williams-Beuren syndrome chromosome region 16
LOC100540894	325	236	301	279	298	279	CUB and sushi domain-containing protein 3
PCYOX1L	373	340	358	305	302	279	prenylcysteine oxidase 1 like
IFT22	289	268	304	259	241	279	intraflagellar transport 20
PDGFD	298	301	331	354	271	279	platelet derived growth factor D
TCTN1	268	266	283	283	260	279	tectonic family member 1
TPST1	417	293	361	267	255	279	tyrosylprotein sulfotransferase 1
LOC104915225	208	214	248	203	205	279	zinc finger protein 462-like
PUS7L	295	258	284	261	257	279	pseudouridylate synthase 7 homolog (S. cerevisiae)-like
LOC104910037	377	254	339	292	310	278	ribosome biogenesis protein bop1-like
DAK	318	259	284	244	277	278	diacylglycerol lipase, beta
LOC104917538							
	208	237	221	298	250	278	voltage-dependent calcium channel subunit alpha-2/delta-1-like
RMDN1	274	278	288	273	265	278	regulator of microtubule dynamics 1
MED11	298	286	292	264	278	278	mediator complex subunit 11
RPRD1B	306	243	307	255	278	278	regulation of nuclear pre-mRNA domain containing 1B
ZMIZ2	372	328	334	281	277	278	zinc finger, MIZ-type containing 2
ROBO4							
	324	330	307	292	360	278	roundabout, axon guidance receptor, homolog 4 (Drosophila)
SRRD	327	322	326	272	299	278	SRR1 domain containing
FARP2							
	255	296	275	301	267	278	FERM, RhoGEF (ARHGEF) and pleckstrin domain protein 1 (chondrocyte-derived)
LOC104910737	159	254	158	644	80	278	uncharacterized LOC104910737
EXOG	239	285	261	324	213	277	exocyst complex component 8
CENPI	326	251	287	228	237	277	centromere protein H
DNASE1L3	287	434	322	410	492	277	deoxyribonuclease I-like 2
HAPLN3	303	454	293	350	291	277	hyaluronan and proteoglycan link protein 2
TDG	331	248	276	266	256	277	thymine-DNA glycosylase
LOC104914722	308	256	308	281	335	277	inositol-3-phosphate synthase 1
DUSP7	294	263	317	240	253	277	dual specificity phosphatase 6
MANSC1	337	252	324	241	305	277	MANSC domain containing 1
CCDC107	366	285	308	277	344	277	coiled-coil domain containing 103
LOC100546124							
	264	224	270	228	220	277	G protein-activated inward rectifier potassium channel 1-like
LOC100544123	262	302	290	320	260	277	PCNA-interacting partner
RAMP1	267	244	223	237	226	277	receptor (G protein-coupled) activity modifying protein 1
ARHGAP25	342	203	273	232	292	277	Rho GTPase activating protein 25
LOC104911107	315	225	277	490	388	276	myosin-binding protein C, cardiac-type-like
STXBPA	354	260	338	259	244	276	syntaxin binding protein 4
ETNK1	314	214	302	257	261	276	electron-transferring-flavoprotein dehydrogenase
UBXN2B	299	328	321	281	286	276	UBX domain protein 2B
PLA2G10	263	300	297	241	285	276	phospholipase A2, group X
CHST9							
	153	390	185	204	113	276	carbohydrate (N-acetylgalactosamine 4-O) sulfotransferase 8
GADD45GIP1	364	297	322	288	253	276	growth arrest and DNA-damage-inducible, gamma
MET	374	308	272	298	296	276	MET proto-oncogene, receptor tyrosine kinase
LOC100545689	319	269	309	300	258	276	cytochrome P450 2H1-like
LOC104915227	179	182	218	212	206	276	zinc finger protein 462-like
LOC104912527	183	177	177	237	169	276	uncharacterized LOC104912527
LOC100541107	360	245	329	263	278	276	tyrosine-protein kinase RYK
MRM1							
	272	232	288	260	247	276	mitochondrial rRNA methyltransferase 1 homolog (S. cerevisiae)
ARMC9	269	265	276	291	244	276	armadillo repeat containing 9
MYL4	343	252	273	219	275	276	myosin, light chain 4, alkali; atrial, embryonic
LOC104912224	270	291	301	342	318	275	uncharacterized LOC104912224
ALS2CL	258	242	247	259	247	275	ALS2 C-terminal like
SP4	285	317	341	359	282	275	Sp4 transcription factor
USP39	405	276	353	258	260	275	ubiquitin specific peptidase 39
BLOC1S1	321	256	312	246	282	275	biogenesis of lysosomal organelles complex-1, subunit 1
LOC100541106	279	251	239	290	247	275	poly [ADP-ribose] polymerase 11-like
LOC100550044	321	251	296	248	245	275	inaD-like protein
LOC104909288	334	248	323	262	263	275	uncharacterized LOC104909288
CSTB	359	246	335	238	268	275	cystatin A (stefin A)
ERN2	329	273	310	249	266	275	endoplasmic reticulum to nucleus signaling 1
LOC104917128	273	274	261	235	290	274	sodium channel modifier 1-like
NTN3	354	252	257	194	397	274	netrin 3
DCLRE1B	296	249	263	209	191	274	DNA cross-link repair 1A

THNSL1	305	270	322	282	265	274	threonine synthase-like 1 (<i>S. cerevisiae</i>)
LOC100543599	344	264	313	275	280	274	histone H4
LOC104913732	223	257	222	246	269	274	uncharacterized LOC104913732
LOC100551033	369	236	335	349	371	274	deleted in malignant brain tumors 1 protein-like
RYR1	241	282	254	347	307	274	ryanodine receptor 1 (skeletal)
C16H16orf59	253	299	287	228	225	274	chromosome 16 open reading frame, human C16orf52
POLQ	369	247	331	228	234	274	polymerase (DNA directed), theta
CELSR3	315	247	324	244	256	273	cadherin, EGF LAG seven-pass G-type receptor 1
C1H3orf38	315	253	321	247	276	273	chromosome 1 open reading frame, human C3orf30
PCDH18	352	295	368	264	263	273	protocadherin 18
TTC13	306	264	298	254	256	273	tetratricopeptide repeat domain 13
NR3C2	266	276	327	279	276	273	nuclear receptor subfamily 3, group C, member 2
LOC104909918	232	268	228	271	214	273	unconventional myosin-VI-like
LOC100303709	254	224	280	208	260	273	melanopsin
RAB9B	291	208	253	240	272	273	RAB9B, member RAS oncogene family
PANK1	296	390	297	247	210	273	pantothenate kinase 1
INPP5F	345	275	335	292	285	273	inositol polyphosphate-5-phosphatase, 72 kDa
PTPMT1	381	289	307	284	326	272	protein tyrosine phosphatase, mitochondrial 1
LOC104915423	291	263	296	274	257	272	ribosomal protein S6 kinase delta-1-like
NPDC1	327	335	313	320	349	272	neural proliferation, differentiation and control, 1
LOC104915871	160	223	131	229	146	272	geranylgeranyl transferase type-2 subunit alpha-like
ACRC	384	252	287	196	206	272	acidic repeat containing
MTR	257	199	306	220	239	272	5-methyltetrahydrofolate-homocysteine methyltransferase
C16H7orf26	251	237	263	245	279	272	chromosome 16 open reading frame, human C16orf96
EXD2	289	276	278	262	253	272	exonuclease 3'-5' domain containing 1
TCEANC							transcription elongation factor A (SII) N-terminal and central domain
	259	285	313	266	264	272	containing
SLC9A2							solute carrier family 9, subfamily A (NHE2, cation proton antiporter 2),
	304	260	259	195	184	272	member 2
ZNF148	316	265	312	266	269	271	zinc finger protein 148
LOC100541746	275	261	261	226	244	271	Na(+)/H(+) exchange regulatory cofactor NHE-RF3-like
IPP	294	226	242	194	237	271	importin 8
KLF8	326	339	315	281	307	271	Kruppel-like factor 7 (ubiquitous)
LOC100545893	304	192	281	214	251	271	uncharacterized LOC100545886
UHRF2							ubiquitin-like with PHD and ring finger domains 2, E3 ubiquitin protein
	295	253	291	295	238	271	ligase
CHD5	272	256	275	245	246	271	chromodomain helicase DNA binding protein 4
WDR7	265	230	276	282	266	271	WD repeat domain 7
CHEK2	280	179	226	178	236	271	checkpoint kinase 1
WDR19	295	248	315	259	266	271	WD repeat domain 19
CMTM7	415	270	343	206	289	271	CKLF-like MARVEL transmembrane domain containing 4
DDX11	383	245	319	211	253	271	DEAD (Asp-Glu-Ala-Asp) box helicase 1
FGF2	265	264	219	239	210	271	fibroblast growth factor 18
ATP8A1							ATPase, aminophospholipid transporter (APLT), class I, type 8A, member
	314	223	272	306	302	271	1
LOC100546590	501	232	409	221	307	271	zinc finger protein castor homolog 1-like
TECR	282	253	285	274	313	271	trans-2,3-enoyl-CoA reductase
MAFK							
	291	317	256	255	236	271	v-maf avian musculoaponeurotic fibrosarcoma oncogene homolog K
PPAPDC2	307	295	267	259	289	271	phosphatidic acid phosphatase type 2 domain containing 2
LRR1	325	245	300	205	252	270	leucine rich repeat protein 1
PAMR1							
	238	306	261	234	255	270	peptidase domain containing associated with muscle regeneration 1
LOC100542733	175	478	221	550	198	270	ADP-ribosylation factor 5
LOC100548706	303	244	312	273	261	270	protein FAM122A
BASP1	434	202	365	242	305	270	brain abundant, membrane attached signal protein 1
LOC104916070	207	271	175	166	134	270	programmed cell death protein 4-like
PHOSPHO2	306	290	310	272	304	270	phosphatase, orphan 2
LOC104914998	293	293	274	250	266	270	KN motif and ankyrin repeat domain-containing protein 1
LOC104916356	397	385	384	278	326	270	zinc finger protein GLIS2-like
LOC104912988	288	242	277	307	261	270	CCR4-NOT transcription complex subunit 1-like
SH3RF1	284	307	354	324	330	269	SH3 domain containing ring finger 1
SYTL4	256	266	253	226	236	269	synaptotagmin-like 4
RAMP2	304	370	324	289	331	269	receptor (G protein-coupled) activity modifying protein 2
PTPN1	321	249	299	287	268	269	protein tyrosine phosphatase, non-receptor type 1
LOC100540806							
	234	205	267	220	262	269	delta and Notch-like epidermal growth factor-related receptor
ACOT8	272	274	258	263	316	269	acyl-CoA thioesterase 8
PITPNC1	274	354	262	365	255	269	phosphatidylinositol transfer protein, cytoplasmic 1
LOC104913962	383	253	343	295	242	269	clathrin heavy chain 1-like
UBN1	290	259	287	286	271	269	ubiquitin 1
LOC104913376	283	252	278	223	249	269	uncharacterized LOC104913376
LOC100545932	264	251	255	352	290	269	leukocyte elastase inhibitor-like
ABHD11	244	272	265	247	238	268	abhydrolase domain containing 11
LOC104916717	365	274	300	255	269	268	zinc finger MIZ domain-containing protein 2-like
BMP4	308	334	295	246	347	268	bone morphogenetic protein 4
TSPAN5	285	226	277	260	246	268	tetraspanin 5
C19H9orf69	292	272	297	238	258	268	chromosome 19 open reading frame, human C9orf173
SLC05A1	263	276	298	359	333	268	solute carrier organic anion transporter family, member 5A1

EIF4EBP3	259	252	212	210	222	268	eukaryotic translation initiation factor 4E binding protein 1
AUTS2	236	257	281	255	282	268	autism susceptibility candidate 2
UMODL1	674	577	549	295	246	268	uromodulin-like 1
C13H19orf40	294	252	260	201	231	267	chromosome 13 open reading frame, human C16orf87
LOC100539836	319	276	263	243	238	267	dysferlin-like
LOC104916440	302	223	240	195	296	267	nuclear factor 1 C-type-like
AP3B2	277	223	262	219	260	267	adaptor-related protein complex 3, beta 2 subunit
CCDC102A	283	298	314	240	260	267	coiled-coil domain containing 101
CASP9	296	256	292	229	222	267	caspase 8 associated protein 2
LOC104917222	326	263	329	206	203	267	spindle and kinetochore-associated protein 1-like
LOC100545547	311	285	287	331	293	267	protein FAM83D-like
RBBP7	323	246	346	216	252	267	retinoblastoma binding protein 7
CHST13	293	255	308	233	269	267	carbohydrate (chondroitin 4) sulfotransferase 12
USP3	346	246	324	300	310	267	ubiquitin specific peptidase 3
CNN2	334	252	291	229	305	267	CNKSR family member 3
LOC100548097	349	282	318	291	288	267	caltractin
LOC104916042	269	293	285	251	224	267	max dimerization protein 3-like
SREK1IP1	242	205	273	220	194	267	SREK1-interacting protein 1
C8H10orf54	313	301	280	265	310	267	chromosome 8 open reading frame, human C10orf32
ACP6	231	267	230	215	227	266	acid phosphatase 6, lysophosphatidic
PTPN23	314	287	277	313	269	266	protein tyrosine phosphatase, non-receptor type 23
IFT46	265	288	238	256	234	266	intraflagellar transport 43
RPRD1A	324	245	282	262	278	266	regulation of nuclear pre-mRNA domain containing 1A
LOC104917221	295	263	315	207	224	266	probable germin-like protein subfamily 2 member 5
VWA8	313	276	317	247	263	266	von Willebrand factor A domain containing 8
XYLT2	351	283	307	274	290	266	xylosyltransferase II
IFI30	274	218	276	227	273	266	intermediate filament family orphan 2
LOC100550265	339	292	280	283	319	266	proto-oncogene tyrosine-protein kinase Yrk
FAM118B	358	268	327	268	328	266	family with sequence similarity 117, member B
PLA2G15	196	259	246	348	258	266	phospholipase A2, group XV
LOC100549111	281	247	327	248	257	266	aldehyde dehydrogenase family 3 member B1-like
TCEA2	284	302	290	251	215	266	transcription elongation factor A (SII), 2
LOC104915434	327	354	310	333	310	266	ranBP-type and C3HC4-type zinc finger-containing protein 1-like
SPATA5L1	303	275	289	235	254	266	spermatogenesis associated 5-like 1
CHRD	225	360	247	272	260	266	chromatin accessibility complex 1
CLP1	266	249	287	229	264	266	clock circadian regulator
LOC100542702	271	241	268	284	279	265	protein FAM73A-like
SAMHD1	345	257	306	269	264	265	SAM domain and HD domain 1
CROCC	294	276	289	241	278	265	crooked neck pre-mRNA splicing factor 1
MOC53	269	232	275	200	228	265	molybdenum cofactor synthesis 3
PLCD3	267	417	279	392	303	265	phospholipase C, delta 3
SIRT7	318	256	272	227	274	265	sirtuin 7
PAFAH2	439	246	476	208	347	265	platelet-activating factor acetylhydrolase 2, 40kDa
SCNN1A	305	170	216	263	440	265	sodium channel, non-voltage-gated 1 alpha subunit
SLC41A3	205	349	184	224	223	265	solute carrier family 41, member 3
COL4A3	291	250	276	251	257	265	collagen, type IV, alpha 2
LOC104916922	353	579	318	372	367	265	myelin protein zero
LRRC32	282	297	287	240	306	265	leucine rich repeat containing 32
PLK3	346	262	269	167	234	265	polo-like kinase 3
KCNG2	474	282	463	319	231	264	potassium voltage-gated channel, subfamily G, member 1
LOC100542038	276	242	245	300	286	264	cytochrome b-c1 complex subunit 2, mitochondrial
LOC104910267	275	226	307	258	262	264	centrosomal protein of 290 kDa-like
SFRP1	422	308	322	274	258	264	secreted frizzled-related protein 1
LOC100548707	150	241	301	232	119	263	AF4/FMR2 family member 2-like
DEPDC5	337	280	308	302	281	263	DEP domain containing 1B
RAI1	348	251	310	279	294	263	retinoic acid induced 1
LOC104916986	360	223	343	281	248	263	uncharacterized LOC104916986
B3GAT1	268	277	273	271	305	263	beta-1,3-glucuronyltransferase 1
LOC104910962	199	186	211	193	195	263	glutamine-dependent NAD(+) synthetase
EEF2KMT	317	212	316	198	225	263	eukaryotic elongation factor 2 kinase
AGK	310	213	324	243	286	263	acylglycerol kinase
ORAOV1	256	268	222	264	211	263	oral cancer overexpressed 1
LOC104916874	338	244	333	254	287	263	uncharacterized LOC104916874
CHMP2A	277	272	238	277	256	263	charged multivesicular body protein 1B
KIAA1211	231	257	288	228	238	263	KIAA1210 ortholog
MYRF	324	243	279	247	302	263	myelin regulatory factor
MYCBP	315	332	321	302	310	263	MYC binding protein
PKHD1							
LOC100542279	121	199	236	222	145	263	polycystic kidney and hepatic disease 1 (autosomal recessive)
	171	296	172	309	241	263	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-1-like
SLC24A4							
	612	224	438	365	659	263	solute carrier family 24 (sodium/potassium/calcium exchanger), member 4
RERGL	278	263	246	272	260	263	RERG/RAS-like
SAP30L	300	259	299	288	266	263	SAP30-like
SH3BP2	284	255	297	273	229	262	SH3-domain binding protein 2
INTU	239	220	270	226	185	262	integrator complex subunit 9

MPP5							
	233	242	248	280	287	262	membrane protein, palmitoylated 5 (MAGUK p55 subfamily member 5)
LDLRAD1	226	243	223	213	177	262	lactate dehydrogenase D
IL15	274	312	235	245	205	262	interleukin 13 receptor, alpha 2
C1QB	326	222	289	308	299	262	complement component 1, q subcomponent, A chain
PTPRU	346	282	333	247	316	262	protein tyrosine phosphatase, receptor type, U
SGSM3	319	306	312	277	296	262	small G protein signaling modulator 3
CABLES1	311	247	307	240	275	262	calcineurin binding protein 1
COQ2	283	240	274	239	231	262	coenzyme Q10 homolog B (S. cerevisiae)
PPCDC	252	271	246	267	286	262	phosphopantothienoylcysteine decarboxylase
GIMD1	205	265	251	170	181	262	GTPase, IMAP family member 8
KIAA0141	287	248	287	295	263	262	KIAA0100 ortholog
LOC104916298	269	290	237	316	238	262	zinc finger protein 36, C3H1 type-like 2
MAPRE2	316	252	289	303	291	262	microtubule-associated protein, RP/EB family, member 2
CIDEA	326	273	279	263	234	262	calcium and integrin binding family member 3
LOC104914649	277	254	283	223	240	262	putative nuclease HARB1
CLMP	321	266	294	262	301	262	calmin (calponin-like, transmembrane)
PUS7	313	245	319	263	246	262	pseudouridylate synthase 7 (putative)
BOLL	276	241	245	302	232	262	boule-like RNA-binding protein
LOC104914175	355	242	317	250	283	262	uncharacterized LOC104914175
AP3S1	277	188	300	193	201	262	adaptor-related protein complex 3, sigma 1 subunit
KIF18A	294	242	337	224	232	261	kinesin family member 17
GALK1	239	264	221	191	185	261	UDP-galactose-4-epimerase
FAM173B	474	259	393	180	347	261	family with sequence similarity 173, member A
LOC104915171	208	263	285	306	221	261	uncharacterized LOC104915171
POC1A	272	243	286	220	207	261	POC1 centriolar protein A
LOC100545241	253	262	271	298	233	261	adenylate cyclase type 3-like
SPATA2L	300	268	259	226	261	261	spermatogenesis associated 2-like
KIAA2018	275	216	269	277	250	261	KIAA2013 ortholog
GGA2							
	306	278	295	275	306	261	golgi-associated, gamma adaptin ear containing, ARF binding protein 1
THSD1	266	289	243	300	247	261	thrombospondin, type I, domain containing 1
WWC2	224	245	244	258	223	261	WW and C2 domain containing 2
TMEM14A	275	253	254	209	260	261	transmembrane protein 14A
LOC104915140	266	244	255	319	234	260	uncharacterized LOC104915140
MYO1A	297	238	273	250	273	260	myosin IA
LSM1	344	299	266	277	294	260	LSM1, U6 small nuclear RNA associated
LOC100538504	392	239	317	225	335	260	TBC1 domain family member 2B-like
LOC100550642	292	344	307	372	255	260	protein NDRG1-like
PALB2	319	244	299	264	258	260	partner and localizer of BRCA2
ZBTB34	265	260	280	297	279	260	zinc finger and BTB domain containing 34
NTN4	299	260	238	260	295	260	netrin 4
RHOBTB2	341	222	327	189	243	260	Rho-related BTB domain containing 2
TAF4							TAF4 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 135kDa
	271	233	273	247	228	260	
TMEM86A	220	253	230	349	296	260	transmembrane protein 86A
ALG5	312	233	299	215	247	260	ALG5, dolichyl-phosphate beta-glucosyltransferase
CHGB	223	277	220	287	254	260	chromogranin A (parathyroid secretory protein 1)
RAB32	275	208	280	200	245	260	RAB32, member RAS oncogene family
TCF24	222	215	203	244	205	260	transcription factor 24
KPNA5	292	258	281	278	283	260	karyopherin alpha 4 (importin alpha 3)
R3HCC1L	370	298	349	268	304	259	R3H domain and coiled-coil containing 1-like
RP9	270	263	262	223	238	259	retinitis pigmentosa 9 (autosomal dominant)
MERTK	272	305	280	228	232	259	MER proto-oncogene, tyrosine kinase
LRRC73	254	246	250	233	244	259	leucine rich repeat containing 73
FGFRL1	318	358	313	275	271	259	fibroblast growth factor receptor 4
TMEM39B	347	250	279	206	237	259	transmembrane protein 39B
LOC100541119							
	300	182	250	182	286	259	zinc finger ZZ-type and EF-hand domain-containing protein 1
ERBB4							
	145	281	179	297	213	258	v-erb-b2 avian erythroblastic leukemia viral oncogene homolog 2
C1H7orf60	311	234	344	273	301	258	chromosome 1 open reading frame, human C7orf55
ABHD17C	294	260	269	264	246	258	abhydrolase domain containing 17C
MAN1A1	307	199	321	240	250	258	mannosidase, alpha, class 1A, member 1
LOC104914944	252	236	298	235	227	258	zinc transporter 5-like
LOC104909528	221	226	264	240	274	258	methyglutaconyl-CoA hydratase, mitochondrial-like
LOC100548121	222	167	221	197	212	258	cathepsin E-A-like
PLK2	284	220	294	227	271	258	polo-like kinase 2
TNFAIP3	242	256	253	284	235	258	tumor necrosis factor, alpha-induced protein 3
SLC39A14	298	278	272	241	238	258	solute carrier family 39 (zinc transporter), member 14
B4GALT4							
	305	239	297	228	274	257	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 4
NMRAL1	249	212	282	224	271	257	NmrA-like family domain containing 1
LOC104914552	253	226	241	258	233	257	uncharacterized LOC104914552
SLC2A1							
	368	243	343	181	308	257	solute carrier family 2 (facilitated glucose transporter), member 1
EME1	325	239	272	189	210	257	endomucin
LOC104909808	356	209	399	318	469	257	uncharacterized LOC104909808
LOC104915560	356	249	328	254	287	257	protein SMG5-like

ZNF438	272	238	286	245	214	257	zinc finger protein 438
BORA	371	202	326	213	249	257	bora, aurora kinase A activator
SLITRK2	311	240	311	180	226	257	SLIT and NTRK-like family, member 2
GGPS1	371	242	321	253	305	257	gametogenetin binding protein 2
CMTM3	281	192	281	219	273	257	cms1 ribosomal small subunit homolog (yeast)
ELK3							extracellular leucine-rich repeat and fibronectin type III domain
	312	222	295	257	247	257	containing 2
LOC104916301	266	260	220	222	216	257	uncharacterized LOC104916301
CIPC	260	228	253	235	252	257	cyclin-dependent kinase 2 interacting protein
VANGL2	337	219	357	233	293	257	VANGL planar cell polarity protein 2
LOC100546933	305	262	289	272	284	256	uncharacterized LOC100546932
LOC100551492	274	234	261	229	233	256	nuclear factor 1 B-type
ZNF703	337	312	268	229	228	256	zinc finger protein 703
PSKH1	285	252	282	254	266	256	protein serine kinase H1
MAFB							
	311	256	268	248	334	256	v-maf avian musculoaponeurotic fibrosarcoma oncogene homolog B
VPS37C	258	233	268	243	240	256	vacuolar protein sorting 37 homolog C (S. cerevisiae)
NXPH4	349	289	346	267	340	256	neurexophilin 4
LOC100540302	273	271	327	301	348	256	protocadherin gamma-B1-like
EFCC1	325	288	302	286	275	256	EF-hand calcium binding domain 7
STARD3NL	259	294	276	270	247	256	STARD3 N-terminal like
NHLRC3	263	221	293	249	261	256	NHL repeat containing 3
STIL	259	215	235	180	200	256	SCL/TAL1 interrupting locus
ENTPD7							
	294	238	237	197	256	256	ectonucleoside triphosphate diphosphohydrolase 6 (putative)
CORO2B	248	228	246	231	289	256	coronin, actin binding protein, 2A
PTPRC	273	202	228	305	268	256	protein tyrosine phosphatase, receptor type, C
LOC100549918	276	258	287	284	258	256	methyl-CpG-binding domain protein 2-like
RNF180	304	222	317	227	241	256	ring finger protein 180
TBC1D22A	250	226	227	238	234	256	TBC1 domain family, member 22A
TMEM120A	250	278	257	266	228	256	transmembrane protein 120A
LOC104910855	268	207	265	281	266	255	uncharacterized LOC104910855
YKT6	270	209	249	217	244	255	YKT6 v-SNARE homolog (S. cerevisiae)
ARHGEF9	301	255	285	243	254	255	Cdc42 guanine nucleotide exchange factor (GEF) 9
UIMC1	323	260	285	281	259	255	ubiquitin interaction motif containing 1
LOC100544843	278	230	250	230	196	255	acetyl-CoA carboxylase
KIAA0753	287	196	249	229	223	255	KIAA0586 ortholog
ALG2	271	261	300	210	227	255	ALG2, alpha-1,3/1,6-mannosyltransferase
ARFGEF1							ADP-ribosylation factor guanine nucleotide-exchange factor 1 (brefeldin
	276	270	296	314	291	255	A-inhibited)
CTSK	317	290	363	198	313	255	cathepsin H
LIN54	277	271	281	275	252	255	lin-52 DREAM MuvB core complex component
LOC104910179	285	265	304	260	215	255	protein cordon-bleu-like
GMCL1	300	262	286	242	245	255	GM2 ganglioside activator
LOC100544425	322	234	317	254	287	255	band 3 anion transport protein-like
LOC100544338	261	237	242	381	292	254	protein furry homolog-like
PITPNM3	233	239	241	232	247	254	PITPNM family member 3
OSGIN1	313	277	272	215	386	254	oxidative stress induced growth inhibitor 1
LOC104917568	211	251	246	238	225	254	uncharacterized LOC104917568
LOC104912447	256	264	278	244	237	254	transcription factor BTF3 homolog 4
LOC100542915	290	264	298	286	249	254	bromodomain testis-specific protein-like
LOC104912561	207	193	211	200	229	254	uncharacterized LOC104912561
LOC100541646							
	311	166	326	164	230	254	erythroblast NAD(P)(+)-arginine ADP-ribosyltransferase-like
ASXL3	266	242	285	268	230	253	additional sex combs like transcriptional regulator 3
CBFA2T2	308	273	282	264	253	253	caveolin 3
LOC104914886	286	256	293	271	232	253	chondroitin sulfate proteoglycan 4-like
RELL1	251	279	281	251	244	253	RELT-like 1
LOC104909340	321	199	275	227	231	253	core histone macro-H2A.1
TBC1D19	227	218	246	229	205	253	TBC1 domain family, member 19
LOC100550264	320	251	288	247	323	253	lysine-specific demethylase 4C-like
LOC104912958	243	263	284	245	224	253	uncharacterized LOC104912958
NOS3	341	299	287	241	298	253	nitric oxide synthase 3 (endothelial cell)
LOC104913970	234	238	249	223	272	252	uncharacterized LOC104913970
LOC104909948	225	316	185	411	260	252	dystonin-like
ZSWIM1	282	228	258	218	213	252	zinc finger, SWIM-type containing 1
LOC100544088	258	183	280	200	177	252	NACHT, LRR and PYD domains-containing protein 3-like
DAPK1	278	225	277	228	215	252	death associated protein 3
LRRC8C	260	204	240	215	217	252	leucine rich repeat containing 8 family, member C
LOC100540620	317	234	285	188	271	252	protein kinase C-binding protein 1-like
ARHGEF16	243	255	270	270	270	252	Rho guanine nucleotide exchange factor (GEF) 16
INPP5E	385	292	355	258	291	252	inositol polyphosphate-5-phosphatase, 145kDa
ELOVL1	344	319	277	266	267	251	elongation factor 1 homolog (S. cerevisiae)
SNX16	227	237	251	202	212	251	sorting nexin 16
LOC100546181	295	217	283	268	235	251	olfactory receptor 51G2-like
SPR							
	290	194	256	170	241	251	sepiapterin reductase (7,8-dihydrobiopterin:NADP+ oxidoreductase)
LOC100540985	238	240	208	330	231	251	uncharacterized LOC100540978
LOC100539640	283	273	277	271	310	251	acrosin-like

POLH	234	260	257	253	238	251	polymerase (DNA directed), eta
CDH23	261	266	246	272	279	251	cadherin 22, type 2
GALNT4	298	243	319	213	246	251	polypeptide N-acetylgalactosaminyltransferase 3
POMGNT2							
	258	246	255	229	256	251	protein O-linked mannose N-acetylglucosaminyltransferase 2 (beta 1,4-)
GRTF1	201	290	205	248	264	251	G-rich RNA sequence binding factor 1
TRIM13	284	274	352	253	234	251	tripartite motif containing 13
LOC104912495	231	250	213	273	222	250	histone H2A deubiquitinase MYSM1-like
LOC100540910	162	242	155	197	209	250	formin-binding protein 1-like
PRR5	312	195	282	212	207	250	proline rich 5 (renal)
RNF2	284	188	297	219	286	250	ring finger protein 2
TRANK1	281	274	273	323	235	250	tetratricopeptide repeat and ankyrin repeat containing 1
LOC100550721	240	490	248	373	272	250	perilipin-3-like
LOC100546146	355	316	327	275	265	250	protein phosphatase 1K, mitochondrial
TNFAIP2	292	292	260	270	265	250	tumor necrosis factor, alpha-induced protein 2
CHODL	281	316	396	195	215	249	chimerin 2
LOC100544938	192	211	195	222	239	249	extracellular fatty acid-binding protein
LOC104915856	311	241	270	187	274	249	uncharacterized LOC104915856
ATMIN	255	255	290	305	260	249	ATM interactor
TRAPPC2L	236	247	246	235	188	249	trafficking protein particle complex 2-like
IL11RA	306	268	289	269	285	249	interleukin 10 receptor, beta
SUMF1	254	269	247	250	232	249	sulfatase modifying factor 1
LOC104915572	256	168	237	184	166	249	pumilio domain-containing protein KIAA0020-like
SERPING1	327	304	286	294	294	249	serpin peptidase inhibitor, clade G (C1 inhibitor), member 1
LOC100541464	235	297	254	315	266	249	tumor necrosis factor ligand superfamily member 10-like
KCNAB2							
	277	225	230	239	252	248	potassium voltage-gated channel, shaker-related subfamily, beta member 1
BRIP1							
	292	211	301	191	241	248	bone morphogenetic protein/retinoic acid inducible neural-specific 3
MIPOL1	235	208	257	232	228	248	mirror-image polydactyly 1
ZDHC12	379	243	328	231	234	248	zinc finger, DHHC-type containing 12
LOC104914348	387	234	315	208	258	248	zonadhesin-like
LOC100549393	408	203	336	224	268	247	hepatoma-derived growth factor-related protein 2
FSD1	214	225	201	229	204	247	fascin actin-bundling protein 2, retinal
FBXL2	234	314	269	299	252	247	F-box and leucine-rich repeat protein 18
DUS1L							
	269	231	288	232	283	247	dual specificity phosphatase and pro isomerase domain containing 1
LOC100547461	363	150	367	178	157	247	voltage-dependent L-type calcium channel subunit alpha-1C
TTI2	263	272	274	227	278	247	TELO2 interacting protein 2
LOC104915092	323	206	270	222	305	247	uncharacterized LOC104915092
SLC27A4	332	271	270	219	246	247	solute carrier family 27 (fatty acid transporter), member 4
SPRY3	285	240	258	237	235	247	sprouty homolog 3 (Drosophila)
DUSP15	237	432	247	269	212	247	dual specificity phosphatase 14
LOC104913932	400	231	427	219	461	247	uncharacterized LOC104913932
GAA	300	292	293	274	287	247	glucose 6 phosphatase, catalytic, 3
LOC100547507	326	231	283	257	311	247	thromboxane-A synthase-like
LOC100543050	247	224	281	225	299	247	sodium- and chloride-dependent GABA transporter 1-like
RNMT	284	232	236	276	215	247	RNA (guanine-7-) methyltransferase
LOC100544547	308	277	304	186	224	247	ovalbumin-related protein Y
LOC104914056	294	202	293	237	231	247	ADP-ribosylation factor GTPase-activating protein 1-like
KCNJ5							
	388	298	314	176	256	247	potassium inwardly-rectifying channel, subfamily J, member 4
MMACHC							
	288	206	256	230	262	246	methylmalonic aciduria (cobalamin deficiency) cblC type, with homocystinuria
BARD1	416	234	358	206	241	246	BRCA1 associated RING domain 1
AVL9	276	220	262	231	256	246	AVL9 homolog (S. cerevisiae)
C1H7orf49	250	257	265	227	238	246	chromosome 1 open reading frame, human C3orf52
LOC104911899	221	253	293	286	229	246	uncharacterized LOC104911899
LOC104913567	183	167	226	186	144	246	uncharacterized LOC104913567
DTX3L	351	232	335	261	304	246	deltex 2, E3 ubiquitin ligase
RERG	185	164	211	209	188	246	RAS-like, estrogen-regulated, growth inhibitor
CCDC149	247	190	253	235	224	246	coiled-coil domain containing 148
LOC104910178	201	238	239	243	238	246	protein cordon-bleu-like
PRR7	375	240	297	208	277	246	proline rich 7 (synaptic)
SUMF2	208	244	219	196	187	246	sulfatase modifying factor 2
SLC4A3	270	287	252	293	270	246	solute carrier family 4 (anion exchanger), member 3
ZNF654	272	236	246	273	243	246	zinc finger protein 654
DNAJC28	326	286	303	259	277	245	DnaJ (Hsp40) homolog, subfamily C, member 27
MGAT5							
	260	240	305	273	246	245	mannosyl (alpha-1,6-)-glycoprotein beta-1,6-N-acetylglucosaminyltransferase
PRKDC	259	220	250	278	229	245	protein kinase, DNA-activated, catalytic polypeptide
AKIP1	277	252	228	181	200	245	A kinase (PRKA) interacting protein 1
RASAL2	258	206	285	240	235	245	RAS protein activator like 2
B3GALNT2	280	235	248	240	211	245	beta-1,3-N-acetylgalactosaminyltransferase 2
PARP15	288	207	244	253	248	245	poly (ADP-ribose) polymerase family, member 15
LOC104915351	266	208	245	231	203	245	transcription factor TFIIIB component B'' homolog
SEC14L5	195	222	193	209	300	245	SEC14-like 5 (S. cerevisiae)
ARMC10	233	229	252	223	220	245	armadillo repeat containing 10
LOC100545944	311	267	292	226	220	245	transcription factor 7-like 2

LOC100540751	421	275	315	184	274	245	tyrosine-protein phosphatase non-receptor type 13
LOC100548742							
	271	259	299	287	269	245	myosin regulatory light chain 2, smooth muscle minor isoform-like
SMAD9	253	300	252	255	288	245	SMAD family member 9
GRK6	245	252	252	215	230	245	glutamate receptor interacting protein 2
LOC104913824	291	263	283	268	275	244	ankyrin repeat domain-containing protein 40-like
CRAMP1L							
	234	240	248	348	227	244	CASP2 and RIPK1 domain containing adaptor with death domain
LOC104912584	324	284	369	291	283	244	uncharacterized LOC104912584
OTUD5	239	240	272	251	231	244	OTU deubiquitinase 5
FANCF	330	247	308	208	220	244	Fanconi anemia, complementation group E
LOC104912428	339	268	260	222	230	244	cytochrome P450 2J2-like
CPNE9	245	256	222	223	247	244	copine VIII
WIPF2	337	251	275	259	230	244	WAS/WASL interacting protein family, member 2
JMJ08	314	268	253	193	250	244	jumonji domain containing 7
LOC104913305	356	296	290	261	312	244	zinc-binding protein A33-like
DZIP1	334	277	302	281	274	244	double zinc ribbon and ankyrin repeat domains 1
LOC100541783	274	238	274	215	297	244	histone H2A
RPH3AL	285	213	254	326	323	244	rabphilin 3A-like (without C2 domains)
LOC100546653	226	275	246	226	239	244	protein FAM171A1-like
GALNT2	307	271	299	280	253	244	polypeptide N-acetylgalactosaminyltransferase 18
TNFRSF10B	384	220	293	193	279	244	tumor necrosis factor receptor superfamily, member 10b
CLCC1	319	242	268	230	222	244	chloride channel accessory 2
LOC100550127	202	250	236	233	267	244	uncharacterized LOC100550127
LOC104914619	330	265	323	267	281	243	zinc finger protein 385C
RNF217	283	254	282	242	226	243	ring finger protein 217
SLC17A5	315	247	296	220	274	243	solute carrier family 17 (acidic sugar transporter), member 5
LOC104911799	510	204	367	211	257	243	uncharacterized LOC104911799
SPECC1L							
	294	234	289	260	237	243	sperm antigen with calponin homology and coiled-coil domains 1-like
LGR4	200	220	256	237	221	243	legumain
LOC104913413	285	236	250	276	286	243	phosphatidylethanolamine N-methyltransferase
C15H5orf24	287	220	264	243	228	243	chromosome 15 open reading frame, human C5orf15
ACOT11	325	361	261	307	241	243	acyl-CoA thioesterase 11
PTPRE	213	241	220	229	207	242	protein tyrosine phosphatase, receptor type, E
LOC104913993	312	242	233	211	220	242	uncharacterized LOC104913993
GATAD1	263	210	271	180	229	242	GATA binding protein 6
OXSM	225	196	194	226	231	242	3-oxoacyl-ACP synthase, mitochondrial
ZNF800	260	228	258	206	249	242	zinc finger protein 800
LOC104915800	298	217	248	211	261	242	UDP-galactose translocator-like
TMEM63A	268	203	263	246	244	242	transmembrane protein 63A
LOC104917426	222	224	205	331	178	242	tripeptidyl-peptidase 2-like
LOC104916701	355	204	304	221	294	242	reticulon-3-like
MTHFS							
	263	195	244	186	203	241	5,10-methylnetetrahydrofolate synthetase (5-formyltetrahydrofolate
HDX	241	202	233	255	234	241	cyclo-ligase)
LOC100546441	256	238	239	251	243	241	high density lipoprotein binding protein
LOC104917413	261	228	276	265	219	241	ecto-NOX disulfide-thiol exchanger 1-like
TBC1D25	259	257	257	286	245	241	uncharacterized LOC104917413
MUL1	264	269	253	278	310	241	TBC1 domain family, member 25
MIIP	251	233	251	236	236	241	mitochondrial E3 ubiquitin protein ligase 1
PLCB4	299	292	321	249	233	241	migration and invasion inhibitory protein
LOC100545947	297	230	251	259	216	241	phospholipase C, beta 4
TMEM192	295	200	283	188	240	241	protein zyg-11 homolog B
SNUPN	274	190	247	194	209	241	transmembrane protein 192
LOC104915365	187	210	224	203	227	241	snurportin 1
LOC100551070	264	192	260	215	310	241	uncharacterized LOC104915365
C7H2orf76	269	220	236	172	222	241	leukotriene C4 synthase-like
TMEM141	230	271	227	230	243	241	chromosome 7 open reading frame, human C2orf69
RNF138	333	280	309	259	291	241	transmembrane protein 141
TCF3	265	196	279	213	234	240	ring finger protein 138, E3 ubiquitin protein ligase
LOC100539644	320	299	319	273	333	240	transcription factor 3
STK19	277	265	235	219	226	240	C-type natriuretic peptide 2-like
LOC104916929	348	234	290	211	241	240	serine/threonine kinase 19
LOC104911375	254	225	260	195	235	240	uncharacterized LOC104916929
RYBP	258	232	243	219	192	240	uncharacterized LOC104911375
DNAJC27	252	236	247	211	217	240	RING1 and YY1 binding protein
LOC100540172	279	190	236	297	270	240	DnaJ (Hsp40) homolog, subfamily C, member 25
LOC104910283	278	179	301	193	265	240	astacin-like metalloendopeptidase
NR2C2AP	289	210	272	193	240	240	piezo-type mechanosensitive ion channel component 2-like
CGRRF1	362	230	312	223	249	240	nuclear receptor 2C2-associated protein
PIP5K1B	287	250	252	219	202	240	cell growth regulator with EF-hand domain 1
LOC104913336	194	202	166	205	191	240	phosphatidylinositol-4-phosphate 5-kinase, type I, beta
MYZAP	245	234	287	270	247	240	meiotic kinetochore factor
LOC100542349	232	219	252	252	190	239	myocardial zonula adherens protein
MYCN							
	224	201	240	221	185	239	cellular nucleic acid-binding protein pseudogene
GULP1	293	295	271	319	250	239	v-myc avian myelocytomatosis viral oncogene neuroblastoma derived
FER	240	195	266	219	188	239	homolog
							guanylate kinase 1
							flap structure-specific endonuclease 1

TEX14	239	254	245	310	290	239	testis expressed 14
RAB39B	263	214	241	200	187	239	RAB39B, member RAS oncogene family
GIN51	347	212	299	167	217	239	glycoprotein integral membrane 1
PTGS1							prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase)
FBXO25	319	294	254	295	262	239	F-box protein 22
C20H17orf58	213	240	282	272	208	239	
OGFOD2	199	274	210	258	225	239	complement component 1, s subcomponent
	253	215	238	220	193	239	2-oxoglutarate and iron-dependent oxygenase domain containing 2
LOC104911721	226	234	233	312	243	239	E3 ubiquitin-protein ligase UBR3-like
C2H6orf120	273	219	268	205	272	239	chromosome 2 open reading frame, human C2orf71
INPP5D	312	233	287	243	297	238	inositol polyphosphate-5-phosphatase, 75kDa
LOC104915425	237	218	254	216	224	238	protein LTV1 homolog
GPT2	257	152	314	152	221	238	G-protein signaling modulator 2
SFMBT1	272	256	281	250	293	238	Scm-like with four mbt domains 1
RAB22A	249	217	253	247	221	238	RAB22A, member RAS oncogene family
CRMP1	297	186	282	192	220	238	cardiolipin synthase 1
ZBTB6	264	234	253	216	233	238	zinc finger and BTB domain containing 6
SGTB							
	290	288	295	261	246	238	small glutamine-rich tetratricopeptide repeat (TPR)-containing, beta
ANKRD52	301	223	262	257	275	238	ankyrin repeat domain 52
LCA5	193	196	188	226	156	238	ladybird homeobox 1
AMT	244	249	224	185	182	238	aminomethyltransferase
CALCRL	290	226	306	243	275	238	calcium binding and coiled-coil domain 2
PKD2	242	232	232	236	178	238	polycystic kidney disease 2 (autosomal dominant)
FRMPD3	339	341	287	274	263	237	FERM and PDZ domain containing 2
LOC104916730	265	210	227	208	231	237	uncharacterized LOC104916730
SOC57	291	194	277	226	257	237	suppressor of cytokine signaling 7
LOC104917321							
	271	260	224	262	271	237	ATP-binding cassette sub-family B member 8, mitochondrial-like
SLC35B3							solute carrier family 35 (adenosine 3'-phospho 5'-phosphosulfate transporter), member B3
	228	237	255	237	209	237	
KCNJ2							
	209	398	219	326	235	237	potassium inwardly-rectifying channel, subfamily J, member 16
LOC100539104	279	169	269	214	244	237	guanylate cyclase soluble subunit beta-2-like
PDF	218	253	200	208	215	237	peptide deformylase (mitochondrial)
ISG20L2	292	233	293	205	238	237	iron-sulfur cluster assembly enzyme
ENTHD2	264	264	269	290	280	237	endosulfine alpha
LOC104911909	380	297	374	272	357	237	uncharacterized LOC104911909
PTPN6	262	190	256	220	300	237	protein tyrosine phosphatase, non-receptor type 6
P2RX4	257	267	242	208	228	237	purinergic receptor P2X, ligand-gated ion channel, 4
IFNAR1	241	211	247	233	220	237	interferon induced transmembrane protein 5
LOC104912918	224	223	215	201	190	237	uncharacterized protein KIAA0355-like
LOC100549758	227	287	244	348	181	237	UPF0687 protein C20orf27 homolog
LOC104913010	372	265	316	199	274	236	G1/S-specific cyclin-E1-like
LOC104909225	262	358	262	255	275	236	kalirin-like
DEPDC1B	289	218	284	212	186	236	DEP domain containing 1
LOC104913069	302	212	258	238	242	236	zinc finger CCCH domain-containing protein 18-like
ERMARD	210	218	243	193	169	236	ER lipid raft associated 2
ROR2	176	210	201	220	295	236	receptor tyrosine kinase-like orphan receptor 2
DICER1	229	200	228	262	227	236	diaphanous-related formin 3
OTUD3	246	213	227	214	242	236	OTU deubiquitinase 3
LOC104915152	244	186	208	211	208	236	acyl-coenzyme A thioesterase 9, mitochondrial-like
LOC104914300	228	232	245	241	185	236	protein dopey-2-like
SLC2A12							
	158	223	172	247	242	236	solute carrier family 2 (facilitated glucose transporter), member 12
RSG1	251	265	249	231	228	236	REM2 and RAB-like small GTPase 1
LOC104911355	183	215	208	214	210	236	uncharacterized LOC104911355
LOC104912952	288	250	298	234	263	236	non-canonical poly(A) RNA polymerase PAPD5-like
C2H1orf115	247	261	265	230	247	236	chromosome 2 open reading frame, human C1orf101
LOC104913458	169	209	174	219	215	236	uncharacterized LOC104913458
KDELC1	272	231	274	283	187	235	potassium channel tetramerization domain containing 9
MARCO	218	80	183	769	180	235	macrophage receptor with collagenous structure
LOC104917432	240	211	219	196	205	235	integral membrane protein GPR180-like
LOC100550977	344	202	279	218	354	235	ceramide synthase 4-like
PDGFC	230	257	283	209	230	235	platelet derived growth factor C
REEP2	304	258	279	214	237	235	receptor accessory protein 2
CDK6	339	227	293	192	260	235	CDK5 regulatory subunit associated protein 3
KLHDC8B	247	489	220	291	277	235	kelch domain containing 8A
LOC104914272	321	236	263	302	247	235	pumilio homolog 1-like
LIN9	285	233	290	215	210	235	lin-7 homolog C (C. elegans)
LOC104912720	247	210	237	187	223	235	caspase recruitment domain-containing protein 8-like
PPARGC1B							
	228	248	216	257	269	235	peroxisome proliferator-activated receptor gamma, coactivator 1 beta
HOMER2	261	344	279	266	200	234	homer homolog 1 (Drosophila)
RBPJ							
	285	210	277	263	256	234	recombination signal binding protein for immunoglobulin kappa J region
FANCL	312	185	287	191	193	234	Fanconi anemia, complementation group I
LOC104917410	228	228	222	226	196	234	uncharacterized LOC104917410

AATF	264	189	236	201	169	234	apoptosis antagonizing transcription factor
PLAT	268	285	206	281	290	234	plasminogen activator, tissue
DHDH	263	216	197	162	163	234	dehydrodolichyl diphosphate synthase
PARP9	328	192	271	238	279	234	poly (ADP-ribose) polymerase family, member 9
LOC100539487	245	229	257	191	190	234	protocadherin gamma-A2-like
LOC104911308	303	230	275	234	252	234	gastrula zinc finger protein XICGF67.1-like
LOC104915161	291	214	267	248	214	234	uncharacterized LOC104915161
LOC104916524	281	221	266	245	243	234	putative uncharacterized zinc finger protein 814
FMNL2	279	223	258	221	229	233	formin-like 1
LOC100540115							
	273	451	233	343	246	233	transcription factor SPT20 homolog, SAGA complex component
LOC104910865	239	205	235	184	198	233	probable tRNA (uracil-O(2)-)-methyltransferase
POMK	271	268	257	270	246	233	protein-O-mannose kinase
PALM	262	267	300	267	268	233	paralemmalin
OIT3	254	260	362	263	332	233	oncoprotein induced transcript 3
LOC104910260	214	229	204	197	191	233	uncharacterized LOC104910260
LOC104916953	227	193	242	212	239	233	lysine-specific demethylase 5C-like
ZNF341	256	227	287	220	234	233	zinc finger protein 341
CHST3							
	310	237	300	202	229	233	carbohydrate (N-acetylglucosamine-6-O) sulfotransferase 2
LOC104916371	231	174	252	230	196	233	cytoplasmic FMR1-interacting protein 1-like
PARD3	251	211	267	266	243	232	par-3 family cell polarity regulator
LOC100540974	149	233	176	264	258	232	guanine nucleotide-binding protein G(t) subunit alpha-2
AIFM2	298	146	305	220	204	232	apoptosis-inducing factor, mitochondrion-associated, 2
LOC104913329	250	191	246	245	198	232	transcription elongation regulator 1-like
AGTR1	143	226	166	388	165	232	angiotensin II receptor, type 1
UTP23							
	240	202	240	203	205	232	UTP23, small subunit (SSU) processome component, homolog (yeast)
RASD1	207	245	201	191	219	232	RAS, dexamethasone-induced 1
MAPT	302	214	322	272	299	232	microtubule-associated protein tau
SEMA3F							
	278	305	261	206	208	232	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3F
PLEKHM3							
	251	218	262	242	212	232	pleckstrin homology domain containing, family M, member 3
EFCAB7	205	195	219	203	195	232	EF-hand calcium binding domain 5
FAM171B	346	255	294	242	246	232	family with sequence similarity 169, member B
SEPSECS							
	288	202	268	236	211	232	Sep (O-phosphoserine) tRNA:Sec (selenocysteine) tRNA synthase
HYAL1	256	350	243	251	221	232	hydrogen voltage-gated channel 1
LOC104910607	231	223	214	252	235	232	WD repeat and FYVE domain-containing protein 3-like
C8H10orf32	285	238	261	220	210	232	chromosome 8 open reading frame, human C10orf2
LOC104911695	238	200	217	235	250	231	unconventional myosin-X-like
ARHGAP20	186	167	202	210	222	231	Rho GTPase activating protein 20
LOC100542421	296	203	256	197	193	231	feather keratin 4-like
WDR37	244	182	244	200	221	231	WD repeat domain 37
DERA	282	221	264	189	231	230	DEP domain containing MTOR-interacting protein
TPCN2	249	194	258	170	200	230	two pore segment channel 2
CAPN6	183	304	176	329	322	230	calpain 5
TRMT5	257	200	228	180	228	230	tRNA methyltransferase 5
LOC104915857	315	175	192	171	244	230	bud site selection protein 27-like
PREX1							
	291	239	261	283	255	230	phosphatidylinositol-3,4,5-trisphosphate-dependent Rac exchange factor 1
C19H9orf142	213	208	212	186	207	230	chromosome 19 open reading frame, human C9orf114
LOC100545259	264	219	237	193	184	230	sodium-dependent proline transporter-like
TGM4	281	288	258	290	335	230	transglutaminase 4
WSCD1	258	245	240	265	241	230	WSC domain containing 1
LOC104911949	239	239	246	229	212	230	uncharacterized LOC104911949
NUDT13							
	192	197	188	190	180	230	nudix (nucleoside diphosphate linked moiety X)-type motif 13
CEP70	248	240	274	259	244	230	centrosomal protein 68kDa
ZBTB24	231	208	234	217	221	229	zinc finger and BTB domain containing 24
ZNF76	273	234	246	206	257	229	zinc finger protein 76
LOC100542198	183	200	162	213	153	229	guanine deaminase
FAAH2	280	223	258	215	230	229	fatty acid amide hydrolase
LOC100546066	152	242	170	205	232	229	gastricsin-like
GPATCH2	230	179	231	237	208	229	G patch domain containing 11
LOC104912517	297	255	266	241	222	229	uncharacterized LOC104912517
ST3GAL5	242	239	256	218	254	229	ST3 beta-galactoside alpha-2,3-sialyltransferase 5
STK11IP	285	211	230	243	240	228	serine/threonine kinase 11 interacting protein
LOC100546403	309	217	284	216	269	228	histone RNA hairpin-binding protein-like
NBN	277	229	230	226	196	228	nibrin
LOC100546034	239	174	229	200	206	228	probable palmitoyltransferase ZDHHC14
ELMSAN1	212	223	230	270	227	228	ELMO/CED-12 domain containing 3
LOC104912371	256	210	223	210	190	228	netrin-G1
LOC104911804	226	167	230	184	173	228	protein disulfide-isomerase A5-like
CAPG	307	167	291	168	360	228	CAP, adenylate cyclase-associated protein, 2 (yeast)
AGTR2	201	195	277	317	219	228	angiotensin II receptor, type 2
EXOC8	250	217	244	215	252	228	exocyst complex component 7
LOC104909637	208	143	230	199	201	228	uncharacterized LOC104909637

B3GALT6							
LOC104913957	351	209	301	194	232	228	UDP-Gal:betaGal beta 1,3-galactosyltransferase polypeptide 6
ENPP2	261	167	231	191	208	227	acetyl-CoA carboxylase-like
LOC104909406	179	267	255	158	214	227	glutamyl aminopeptidase (aminopeptidase A)
LOC104915349	261	181	220	216	271	227	uncharacterized LOC104909406
MOB3C	232	197	283	204	215	227	uncharacterized LOC104915349
LOC104913311	252	198	250	218	246	227	MOB kinase activator 3C
MAZ	215	187	226	227	185	227	lysine-specific demethylase 3B-like
	221	213	230	216	197	227	MYC-associated zinc finger protein (purine-binding transcription factor)
EDIL3	223	254	218	129	162	227	endothelial differentiation-related factor 1
LOC104913958	281	219	258	208	195	227	protein AATF-like
FAM92A1	298	253	305	244	244	227	family with sequence similarity 91, member A1
ALG11	289	175	307	161	202	227	ALG11, alpha-1,2-mannosyltransferase
RFX5	237	204	226	242	256	227	regulatory factor X, 5 (influences HLA class II expression)
GCC1	273	246	273	223	226	227	glycine C-acetyltransferase
PPP1R16B	275	255	274	235	220	227	protein phosphatase 1, regulatory subunit 16B
ZSWIM7	231	189	243	184	222	227	zinc finger, SWIM-type containing 7
BEST3	264	196	220	188	201	226	bestrophin 3
LOC104914598							
	221	199	195	182	186	226	mediator of RNA polymerase II transcription subunit 24-like
LOC100549639	256	205	242	204	261	226	paired box protein Pax-3
BBS7	220	237	219	243	203	226	Bardet-Biedl syndrome 7
CHRNA3	295	168	323	205	240	226	cholinergic receptor, nicotinic, alpha 2 (neuronal)
LOC104912651	281	241	248	250	247	226	cohesin subunit SA-1-like
WDSUB1							
	221	171	213	198	217	226	WD repeat, sterile alpha motif and U-box domain containing 1
MEX3B	264	168	242	175	200	226	mex-3 RNA binding family member B
C16H16orf52	237	226	239	223	212	226	chromosome 16 open reading frame, human C16orf45
LOC104914750	238	183	217	222	173	226	ectopic P granules protein 5 homolog
LOC100549421	397	298	299	182	206	225	tomoregulin-1-like
TRERF1	297	254	272	235	259	225	transcriptional regulating factor 1
C28H1orf74	248	190	258	161	242	225	chromosome 28 open reading frame, human C1orf186
CHIC2	232	194	242	241	244	225	cysteine-rich hydrophobic domain 1
LOC104915023	189	180	207	226	187	225	nuclear factor 1 B-type
MTMR8	254	238	249	229	209	225	myotubularin related protein 8
LOC104910075	286	233	267	208	242	225	checkpoint protein HUS1-like
LOC104914612	286	251	273	246	257	225	uncharacterized LOC104914612
LOC104909335	212	248	208	257	156	225	putative homeodomain transcription factor 2
EPT1	280	201	242	210	228	225	EPS8-like 3
CCDC77	212	188	211	175	152	225	coiled-coil domain containing 73
LOC100548147	189	188	185	189	159	225	vitellogenin-2
SOX18	258	197	227	217	222	225	SRY (sex determining region Y)-box 18
IQCB1	265	284	273	265	229	225	IQ motif containing with AAA domain 1
TMEM243	194	240	247	217	233	224	transmembrane protein 243, mitochondrial
KIAA0226	258	248	283	235	245	224	KIAA0196 ortholog
PTK2	227	191	233	228	237	224	protein tyrosine kinase 2
NUDT19							
	283	252	285	234	191	224	nudix (nucleoside diphosphate linked moiety X)-type motif 19
GPR146	177	300	224	269	161	224	G protein-coupled receptor 144
LOC100543661							
	250	196	266	221	230	224	parathyroid hormone/parathyroid hormone-related peptide receptor-like
INO80B	289	272	278	268	298	224	INO80 complex subunit
GOSR1	212	190	189	199	199	224	golgi reassembly stacking protein 2, 55kDa
TIMELESS	372	254	312	187	226	224	timeless circadian clock
LOC100542976	277	202	277	179	218	224	histone H3-like
LOC104909269	179	189	234	225	179	223	ribosome-releasing factor 2, mitochondrial-like
LOC104911865							
	263	268	258	230	257	223	voltage-dependent L-type calcium channel subunit alpha-1C-like
EPHA2	296	230	262	229	247	223	EPH receptor A1
TM7SF3	214	195	229	206	216	223	transmembrane 7 superfamily member 3
LOC100546851	239	286	225	274	206	223	motor neuron and pancreas homeobox protein 1-like
SEN7	238	206	224	269	227	223	SUMO1/sentrin specific peptidase 7
SH3TC2	256	236	247	238	254	223	SH3 domain and tetratricopeptide repeats 2
LOC100539161	304	207	254	195	247	223	G1/S-specific cyclin-E1-like
LOC104914131	267	230	268	226	285	223	uncharacterized LOC104914131
LOC104909747	291	206	249	227	200	223	sorting nexin-9-like
ANTXRL	265	226	243	256	203	223	anthrax toxin receptor-like
SNTB2							
	255	215	218	152	223	223	syntrophin, beta 2 (dystrophin-associated protein A1, 59kDa, basic component 2)
ZFAND2B	272	293	264	247	251	223	zinc finger, AN1-type domain 2B
C24H8orf4	216	259	225	183	207	222	chromosome 24 open reading frame, human C2orf42
FLI1	224	192	230	206	205	222	folliculin
NAV3	274	186	287	216	238	222	neuron navigator 3
TMEM19	267	270	252	296	218	222	transmembrane protein 19
ETV1							
	353	217	326	255	227	222	v-ets avian erythroblastosis virus E26 oncogene homolog 2
FAM26E	272	258	284	230	248	222	family with sequence similarity 26, member D
HPS4	255	213	227	201	225	222	Hermansky-Pudlak syndrome 3

LOC104910874	207	197	177	223	153	222	actin-binding LIM protein 2-like
NBEAL2	276	211	287	208	255	222	neurobeachin-like 2
PTX3	469	233	287	90	111	222	pentraxin 3, long
FAM219B	229	231	208	198	208	222	family with sequence similarity 219, member A
RSPRY1	237	206	234	207	217	222	ring finger and SPRY domain containing 1
IFT88	253	211	259	233	216	221	intraflagellar transport 81
ABHD17B	229	180	246	180	171	221	abhydrolase domain containing 17B
CCDC137	233	181	224	166	225	221	coiled-coil domain containing 134
LOC104913779	228	495	214	332	192	221	uncharacterized LOC104913779
GALNT5	225	247	253	149	171	221	polypeptide N-acetylgalactosaminyltransferase 4
LOC100541931	218	208	234	208	198	221	zinc finger CCCH domain-containing protein 18-like
LOC104917604	267	244	241	219	211	221	intraflagellar transport protein 88 homolog
LOC104914426	204	209	238	180	204	221	uncharacterized LOC104914426
ORMDL1	195	309	180	250	210	221	ORMDL sphingolipid biosynthesis regulator 1
SLC35A3	244	190	249	192	211	221	solute carrier family 35 (UDP-N-acetylglucosamine (UDP-GlcNAc) transporter), member A3
KCNJ8	262	244	267	252	281	221	potassium inwardly-rectifying channel, subfamily J, member 6
DEF6	236	229	231	189	236	221	death effector domain containing
BCL7A	269	199	287	196	203	221	B-cell CLL/lymphoma 7A
GALT	194	186	229	192	149	221	galanin receptor 3
ABCC3	227	179	256	154	163	221	ATP-binding cassette, sub-family C (CFTR/MRP), member 3
CENPP	300	217	278	192	191	221	centromere protein O
SIRT5	218	241	239	266	251	221	sirtuin 5
EBF1	236	183	252	191	200	221	estrogen receptor binding site associated, antigen, 9
CENPU	320	184	295	181	194	221	centromere protein T
IGF1R	261	236	232	213	202	221	immunoglobulin superfamily, DCC subclass, member 4
LOC100545437	184	186	192	180	208	221	ras-related GTP-binding protein A
LRRC14	248	176	225	172	223	221	leucine rich repeat containing 14
LOC104914783	249	154	224	170	193	221	uncharacterized LOC104914783
EPHX2	276	244	234	215	239	220	epoxide hydrolase 1, microsomal (xenobiotic)
LOC104916142	243	224	241	193	286	220	uncharacterized LOC104916142
PTN	242	324	269	303	196	220	pleiotrophin
DCDC2B	275	246	261	244	343	220	doublecortin domain containing 2
PPCS	256	208	269	187	211	220	phosphopantothienoylcysteine synthetase
LOC104911111	266	205	237	240	255	220	CUGBP Elav-like family member 1
PAQR3	297	173	225	163	206	219	progesterin and adipoQ receptor family member III
LOC104909839	282	208	246	178	174	219	tubulin epsilon chain-like
ZBTB4	310	251	266	263	254	219	zinc finger and BTB domain containing 4
TRUB1	204	169	198	163	179	219	TruB pseudouridine (psi) synthase family member 1
MAML2	269	218	277	235	221	219	mastermind-like 2 (Drosophila)
SLC27A1	193	436	202	384	183	219	solute carrier family 27 (fatty acid transporter), member 1
HS3ST5	172	177	213	214	231	219	heparan sulfate (glucosamine) 3-O-sulfotransferase 3B1
RAB26	247	252	239	269	221	219	RAB26, member RAS oncogene family
SLC4A11	313	305	320	264	283	219	solute carrier family 4, sodium borate transporter, member 11
FLVCR1	258	241	231	256	228	219	fms-related tyrosine kinase 4
ORC2	300	192	237	199	196	219	origin recognition complex, subunit 2
DOCK4	218	204	256	229	252	219	dedicator of cytokinesis 3
LOC104910320	186	206	175	259	206	219	dystrobrevin alpha-like
C2H2orf43	265	219	257	214	232	219	chromosome 2 open reading frame, human C1orf198
CHTF8	269	213	280	158	209	219	CTF18, chromosome transmission fidelity factor 18 homolog (S. cerevisiae)
FIGNL1	283	217	254	179	181	219	fidgetin
SSH3	208	258	197	224	207	219	slingshot protein phosphatase 3
AAED1	237	212	272	201	168	218	AhpC/TSA antioxidant enzyme domain containing 1
ITPR2	310	208	263	229	223	218	inositol 1,4,5-trisphosphate receptor, type 1
MARS2	225	205	221	198	209	218	methionyl-tRNA synthetase 2, mitochondrial
MTRF1L	226	197	222	208	207	218	mitochondrial translational release factor 1-like
LRRC58	228	197	243	196	239	218	leucine rich repeat containing 58
PDE8B	181	168	188	166	147	218	phosphodiesterase 8B
LRP11	293	219	290	227	226	218	low density lipoprotein receptor-related protein 11
LPAR1	244	202	264	180	218	218	lysophosphatidic acid receptor 1
LOC100541880	246	166	251	205	209	218	coagulation factor XIII B chain-like
PDPN	197	288	302	170	206	217	podoplanin
GCNT1	192	169	240	164	159	217	GCN1 general control of amino-acid synthesis 1-like 1 (yeast)
LRRK1	271	234	255	225	233	217	leucine-rich repeat kinase 1
LOC104915278	195	169	215	137	123	217	ubiquitin-like-conjugating enzyme ATG10
LOC104916768	240	197	196	208	215	217	uncharacterized LOC104916768
THNSL2	271	176	245	195	268	217	threonine synthase-like 2 (S. cerevisiae)
CEP44	261	165	256	181	197	217	centrosomal protein 41kDa
TAGLN	331	483	256	411	493	217	transgelin
DPM3	297	268	285	211	329	217	dolichyl-phosphate mannosyltransferase polypeptide 2, regulatory subunit
FAM204A	176	186	215	212	193	217	family with sequence similarity 19 (chemokine (C-C motif)-like), member A4
PIGQ	205	197	215	197	152	217	phosphatidylinositol glycan anchor biosynthesis, class Q

LOC100550173	219	180	225	229	217	217	putative olfactory receptor 10AC1
LOC100546326	234	186	222	164	167	216	ubiquitin carboxyl-terminal hydrolase 34-like
SDCCAG8	230	194	216	168	157	216	serologically defined colon cancer antigen 8
LOC104910027	245	208	212	191	222	216	uncharacterized LOC104910027
LOC104917153							
	246	204	226	246	214	216	small conductance calcium-activated potassium channel protein 3
FICD	209	213	208	185	195	216	fin bud initiation factor homolog (zebrafish)
PCGF1	204	161	175	181	201	216	polycomb group ring finger 1
MPP6							
	247	158	214	159	168	215	membrane protein, palmitoylated 6 (MAGUK p55 subfamily member 6)
LOC104916335	190	174	189	225	254	215	uncharacterized LOC104916335
HINFP	203	197	201	191	174	215	HIG1 hypoxia inducible domain family, member 2A
LOC104917073	232	260	195	274	243	215	hyphally regulated cell wall protein 3-like
LOC100541519	219	189	206	200	195	215	deleted in malignant brain tumors 1 protein-like
FRS2	260	197	239	210	220	215	ferric-chelate reductase 1-like
CYFIP2	143	234	168	252	116	215	cytochrome c
LOC100543285	244	177	226	202	197	215	zinc finger protein 501-like
SAMD11	261	231	244	200	231	215	sterile alpha motif domain containing 11
TMEM130	247	206	200	175	172	214	transmembrane protein 130
LOC104914124	250	197	259	222	242	214	calsyntenin-1-like
TEX9	291	179	245	194	200	214	testis expressed 9
SAMD13	247	184	238	190	231	214	sterile alpha motif domain containing 13
TRMT12	237	204	203	188	203	214	tRNA methyltransferase 12 homolog (S. cerevisiae)
LOC100548603	281	178	250	212	197	214	peptidyl-prolyl cis-trans isomerase D-like
LOC100546305	245	272	244	215	270	214	nuclear receptor corepressor 1-like
MANEA	231	190	230	197	198	214	mannosidase, endo-alpha
PLA1A	258	243	234	211	260	214	phospholipase A1 member A
OBFC1	225	189	224	169	174	214	oligonucleotide/oligosaccharide-binding fold containing 1
ATHL1	173	227	194	207	165	214	ATH1, acid trehalase-like 1 (yeast)
LOC104915340	244	216	233	259	183	214	dmX-like protein 1
BBIP1	213	146	208	164	247	213	BBSome interacting protein 1
OSBPL5	294	201	248	216	247	213	oxysterol binding protein-like 5
LOC104917015	291	221	253	224	240	213	dynactin subunit 1-like
CHST2							
	242	226	226	210	210	213	carbohydrate (N-acetylglactosamine 4-sulfate 6-O) sulfotransferase 15
SLC19A3	234	234	207	198	204	213	solute carrier family 19 (thiamine transporter), member 3
TARBP2	265	252	247	241	254	213	TAR (HIV-1) RNA binding protein 2
ENKD1	208	199	205	178	194	213	energy homeostasis associated
LOC104910826	292	199	315	272	260	213	epididymis-specific alpha-mannosidase-like
FUCA2	198	177	197	214	182	213	fucosidase, alpha-L- 1, tissue
CTSO	224	246	224	241	214	213	cathepsin L
TBX18	236	201	232	268	234	213	T-box 18
DCK	270	176	200	166	164	213	dachsous cadherin-related 2
SARM1	153	176	171	196	143	213	sterile alpha and TIR motif containing 1
ST6GALNAC3							ST6 (alpha-N-acetyl-neuraminyl-2,3-beta-galactosyl-1,3)-N-
	260	175	283	185	232	213	acetylglactosaminide alpha-2,6-sialyltransferase 3
TTC26	204	249	209	214	186	213	tetratricopeptide repeat domain 26
LOC104916964	301	227	259	234	266	213	uncharacterized LOC104916964
GRAMD1C	211	220	218	225	198	212	GRAM domain containing 1B
TSHZ2	225	209	230	206	242	212	teashirt zinc finger homeobox 2
LOC100545360							
	227	212	232	255	191	212	erythroblast NAD(P)(+)-arginine ADP-ribosyltransferase-like
LOC104911765	277	220	292	284	246	212	lymphocyte antigen 75-like
CDK8	247	196	224	176	182	212	cyclin-dependent kinase 6
LOC104910371	207	176	183	216	197	212	eyes absent homolog 1-like
ABCB11							
	361	268	316	241	280	212	ATP-binding cassette, sub-family B (MDR/TAP), member 11
LOC104913072	191	96	218	184	264	212	large neutral amino acids transporter small subunit 1-like
RALGAP2	287	216	295	201	222	212	Ral GTPase activating protein, alpha subunit 2 (catalytic)
APOLD1	235	197	222	189	210	212	apolipoprotein L domain containing 1
CEP192	293	226	248	230	206	212	centrosomal protein 19kDa
LOC104913377	219	188	226	217	200	212	uncharacterized LOC104913377
LOC104915256	175	148	198	192	141	212	arrestin domain-containing protein 3-like
SPINT1	280	255	263	239	258	212	serine peptidase inhibitor, Kunitz type 1
DYNLRB2	321	238	246	200	200	212	dynein, light chain, roadblock-type 1
COG3	248	207	205	230	244	212	component of oligomeric golgi complex 2
LOC104916783	179	125	214	172	209	212	class II histocompatibility antigen, B-L beta chain-like
LOC104911104	318	215	256	235	254	212	oxysterols receptor LXR-alpha-like
LOC104915971	256	203	238	219	223	211	signal transducer and transcription activator 6-like
LOC100540188	103	183	140	189	193	211	thiamine transporter 2-like
LOC100540921	289	270	274	232	307	211	breast carcinoma-amplified sequence 3
FAM210B	231	128	219	151	186	211	family with sequence similarity 210, member A
ARHGAP35	320	248	250	261	236	211	Rho GTPase activating protein 35
RARB	211	174	190	188	155	211	retinoic acid receptor, beta
PDXP	274	208	258	167	234	211	pyridoxal (pyridoxine, vitamin B6) phosphatase
LOC104913130	243	158	207	173	170	211	condensin complex subunit 1-like
HBEGF	197	214	183	219	184	211	hepatitis A virus cellular receptor 2
LOC100551461	263	187	276	225	277	211	toll-like receptor 1
PDE2A	165	163	144	175	150	211	phosphodiesterase 2A, cGMP-stimulated

IRAK1BP1	246	189	235	167	200	211	IQ motif and ubiquitin domain containing
RBM41	221	181	216	191	234	211	RNA binding motif protein 41
CCDC3	260	295	246	222	203	211	coiled-coil domain containing 28B
GPR34	189	231	234	216	220	211	G protein-coupled receptor 27
LOC104917101	181	219	183	265	228	211	keratin-associated protein 16-1
IFIH1	211	170	206	175	194	211	interferon-induced protein 35
WDFY2	340	205	329	159	313	210	WD repeat and FYVE domain containing 2
FBXL13	202	236	220	309	226	210	F-box and leucine-rich repeat protein 12
TMEM144	180	191	195	178	157	210	transmembrane protein 144
LOC100539204	123	201	152	209	175	210	collagen alpha-1(XII) chain-like
LZTFL1	233	167	219	185	218	210	leucine zipper transcription factor-like 1
LOC100547773	198	188	203	213	207	210	interleukin-15 receptor subunit alpha-like
SMPD2							sphingomyelin phosphodiesterase 2, neutral membrane (neutral sphingomyelinase)
	195	232	195	158	205	210	
NUDT5							
	259	181	250	172	197	210	nudix (nucleoside diphosphate linked moiety X)-type motif 5
LOC104915693	301	243	253	249	232	210	dynactin subunit 1-like
LOC100549359	211	201	228	212	159	210	cell division cycle 5-like protein
CPED1	218	247	194	180	226	210	cytoplasmic polyadenylation element binding protein 4
LOC104916404	259	157	256	163	242	210	immediate early response gene 5-like protein
NRF1	228	185	226	271	291	210	nuclear respiratory factor 1
RGS9	288	182	281	185	231	210	regulator of G-protein signaling 9
LOC100539085	316	204	257	166	182	210	myelin and lymphocyte protein-like
METTL24	302	218	269	183	214	210	methyltransferase like 24
LOC100549160	115	300	165	424	176	210	transmembrane protease serine 11E-like
SSBP2	181	184	211	189	165	210	single-stranded DNA binding protein 2
ATG7	163	162	182	167	165	210	autophagy related 7
FHL5	248	172	196	182	285	209	four and a half LIM domains 3
TMEM170B	242	246	214	202	187	209	transmembrane protein 170B
PHYKPL	184	193	159	184	169	209	5-phosphohydroxy-L-lysine phospho-lyase
PIAS4	250	177	234	196	242	209	protein inhibitor of activated STAT, 4
LOC104914310	187	227	201	180	205	209	discoidin, CUB and LCCL domain-containing protein 1-like
SLC39A3	258	235	220	193	216	209	solute carrier family 39 (zinc transporter), member 3
NT5DC3	483	293	386	241	344	209	5'-nucleotidase domain containing 3
LOC104911028	250	186	256	233	222	209	nucleobindin-2-like
LOC104913866	241	189	213	189	255	209	general transcription factor II-I-like
FCHSD2	243	232	225	216	211	209	FCH and double SH3 domains 1
LOC100545344	260	527	386	261	229	209	serine/threonine-protein kinase TAO3
LOC100551071	257	255	235	248	239	209	glucocorticoid receptor-like
LOC100544372	159	272	186	313	270	209	uncharacterized LOC100544371
LOC104909521	156	206	148	168	172	209	ninein-like protein
TSEN34	245	242	216	212	206	209	TSEN34 tRNA splicing endonuclease subunit
FAM188B	222	188	209	173	192	209	family with sequence similarity 188, member A
PLSCR1	188	316	214	223	228	208	phospholipid scramblase 1
RSBN1	239	232	230	222	249	208	round spermatid basic protein 1
FAM168A	269	223	275	231	228	208	family with sequence similarity 167, member B
COL8A1	214	416	195	306	388	208	collagen, type VII, alpha 1
LOC104915944	341	221	262	148	217	208	polyamine-modulated factor 1-like
LOC104911650							
	248	182	229	245	181	208	N-acetylglucosamine-1-phosphotransferase subunits alpha/beta-like
LOC104915842	230	224	221	173	169	208	gonadotropin-releasing hormone II receptor-like
LOC100547972	285	206	262	212	210	208	5-hydroxytryptamine receptor 2A
ARL3	278	167	241	171	187	208	ADP-ribosylation factor-like 3
PRDM11	256	241	269	231	201	208	PR domain containing 11
MB21D1	298	182	259	163	200	208	Mab-21 domain containing 1
LYRM4	238	217	223	207	213	208	LYR motif containing 4
RAB5A	202	161	211	203	188	208	RAB5A, member RAS oncogene family
SOWAHC	269	212	231	189	191	208	soosondawah ankyrin repeat domain family member C
LOC100539684	149	207	125	177	139	207	thyrotropin-releasing hormone receptor-like
ELK4	254	198	245	225	224	207	ELK3, ETS-domain protein (SRF accessory protein 2)
LOC100543750	259	178	235	202	226	207	osteocalcin-like
LOC104916405	213	242	222	241	244	207	ATP-binding cassette sub-family F member 3-like
PSTK	187	175	195	164	173	207	phosphoseryl-tRNA kinase
LOC104910954							
	254	172	250	222	201	207	mitotic checkpoint serine/threonine-protein kinase BUB1 beta-like
NMNAT1	198	141	178	187	212	207	nicotinamide nucleotide adenyllyltransferase 1
LOC100547303							
	207	234	177	212	222	207	MAP kinase-interacting serine/threonine-protein kinase 2-like
PRR5L	345	223	226	252	165	207	proline rich 5 like
NXPE3	206	159	171	210	188	207	neurexophilin and PC-esterase domain family, member 3
LOC104917066	248	183	264	179	242	207	early activation antigen CD69-like
CDH22	175	213	167	156	126	207	cadherin 20, type 2
LOC104910425	257	171	211	190	200	207	ER membrane protein complex subunit 2-like
LOC104911679	232	223	250	208	218	207	probable hydrolase PNKD
PDZD7	190	213	189	240	273	207	PDZ domain containing 7
LOC104914590	249	173	227	211	221	207	uncharacterized LOC104914590
TC2N	223	256	243	226	209	207	tandem C2 domains, nuclear
TBC1D32	203	214	223	223	204	206	TBC1 domain family, member 32
LOC104913385	252	211	230	202	194	206	transmembrane channel-like protein 7

LOC100546547	207	202	205	190	197	206	ethylmalonyl-CoA decarboxylase
LOC104914014	185	148	194	148	172	206	uncharacterized LOC104914014
OASL	166	129	178	238	218	206	2'-5'-oligoadenylate synthetase-like
APLF	151	155	208	185	184	206	aprataxin and PNKP like factor
GATSL2							
	281	302	257	307	146	206	glycine amidinotransferase (L-arginine:glycine amidinotransferase)
CARF	183	156	191	164	157	205	caspase recruitment domain family, member 10
LOC104912253	213	209	226	208	214	205	ecotropic viral integration site 5 protein homolog
LOC104915584	179	184	163	150	173	205	ciliary neurotrophic factor receptor subunit alpha-like
LOC100540025	179	204	167	219	205	205	poly(A) RNA polymerase, mitochondrial-like
LOC104914200	149	155	168	215	147	205	uncharacterized LOC104914200
LOC100547482	248	213	254	246	214	205	transmembrane emp24 domain-containing protein 11-like
PPARGC1A							
	141	179	127	173	161	205	peroxisome proliferator-activated receptor gamma, coactivator 1 alpha
C10H1orf21	231	219	263	223	226	205	chromosome 10 open reading frame, human C1orf177
LOC100539441	113	179	134	166	251	205	EF-hand domain-containing family member C2
LOC104912117	139	172	183	303	151	205	TSC22 domain family protein 3-like
VCPKMT	238	223	211	180	192	205	valosin containing protein lysine (K) methyltransferase
ADA	271	208	241	214	281	205	adenosine deaminase
ZBTB11	204	172	213	201	205	205	zinc finger and BTB domain containing 11
PEA15	181	164	201	179	265	205	phosphoprotein enriched in astrocytes 15
MKNK1	239	174	231	163	185	204	MAP kinase interacting serine/threonine kinase 1
PNPO	180	269	183	181	175	204	pyridoxamine 5'-phosphate oxidase
CNEP1R1	188	176	210	199	179	204	CNDP dipeptidase 2 (metallopeptidase M20 family)
B3GNT5							
	317	186	279	180	216	204	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 5
ST3GAL1	190	148	242	240	199	204	ST3 beta-galactoside alpha-2,3-sialyltransferase 1
LOC104912888	257	243	208	238	237	204	uncharacterized LOC104912888
LOC100542221	201	199	191	178	192	204	N-acetyltransferase 8 like
CAMKK2							
	266	201	216	205	201	204	calcium/calmodulin-dependent protein kinase kinase 1, alpha
JAG1	274	245	225	213	247	204	jade family PHD finger 3
USP53	206	214	225	247	236	204	ubiquitin specific peptidase 53
PELI2	179	164	228	208	186	204	pellino E3 ubiquitin protein ligase family member 2
RAD9B	193	217	172	162	214	203	RAD9 homolog B (S. pombe)
ETS1	322	202	279	213	243	203	ethanolamine-phosphate phospho-lyase
SENP1	315	197	234	170	189	203	SUMO1/sentrin specific peptidase 1
LOC104909218	265	178	224	196	199	203	integrator complex subunit 10
LOC100539427	180	184	217	224	169	203	zeta-sarcoglycan-like
PCMTD2							
	181	182	186	240	190	203	protein-L-isoaspartate (D-aspartate) O-methyltransferase domain
RBMS2	260	191	190	189	218	203	containing 2
ATXN1	211	162	191	224	202	203	RNA binding motif, single stranded interacting protein 2
LOC100538883							ataxin 1
	228	205	262	217	251	203	phosphorylase b kinase regulatory subunit alpha, liver isoform
RNLS	200	178	192	146	171	203	renalase, FAD-dependent amine oxidase
RASGEF1A	269	196	240	175	159	203	RasGEF domain family, member 1A
GCH1	210	232	182	209	190	203	glucagon receptor
LOC104911812							
	177	200	212	243	207	202	bromodomain adjacent to zinc finger domain protein 2B-like
MLLT1							
	246	197	263	187	224	202	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog,
IQUB	145	205	141	153	138	202	Drosophila); translocated to, 1
MTBP	260	182	239	160	169	202	IQ motif and Sec7 domain 3
DPH2	221	181	191	163	192	202	MDM2 binding protein
LOC104912853	180	193	201	179	182	202	diphthamide biosynthesis 1
MORN4	260	242	248	182	218	202	rap1 GTPase-activating protein 1-like
HOXA10	211	176	194	207	204	202	MORN repeat containing 4
LOC104910841							HORMA domain containing 2
	234	184	213	205	221	202	biorientation of chromosomes in cell division protein 1-like 1
PHLPP1	317	199	271	206	200	202	PH domain and leucine rich repeat protein phosphatase 1
LOC104914933	217	191	230	221	175	202	protein LAP2-like
ESF1	220	182	242	213	219	202	esterase D
LOC104909272	198	175	202	216	213	202	WASH complex subunit 7-like
RWDD3	139	148	163	148	141	202	RWD domain containing 3
CCM2L	268	226	221	211	202	201	cerebral cavernous malformation 2
LOC100544767	240	182	230	193	208	201	DENN domain-containing protein 5A
LOC104912649	223	182	211	229	173	201	vacuolar protein sorting-associated protein 8 homolog
LOC104913067	227	175	222	179	209	201	uncharacterized LOC104913067
LOC104915848	209	257	183	256	225	201	chromosome unknown open reading frame, human C17orf53
LOC100547297	204	273	197	349	214	201	acidic mammalian chitinase-like
KLHL29	218	197	224	181	216	201	kelch-like family member 28
LOC104917248	185	221	129	234	143	201	serine/arginine-rich splicing factor 6-like
LOC100539745	211	156	215	167	181	201	histone H1.03-like
LOC104910938	198	191	196	189	222	201	palmitoyltransferase ZDHHC13-like
SLCO4A1	257	172	168	138	156	201	solute carrier organic anion transporter family, member 4A1
LOC104911986	270	255	263	195	224	201	V-type proton ATPase subunit e 2
LOC100550697	282	199	303	190	161	201	carboxypeptidase Z
ADCK2	226	190	242	188	199	200	aarF domain containing kinase 2

LOC100543530	205	210	186	220	168	200	cytochrome c-type heme lyase
DDA1	247	220	228	194	209	200	dicarbonyl/L-xylulose reductase
TNMD	167	369	583	127	165	200	tenomodulin
LOC100546971	248	164	217	184	190	200	uncharacterized protein KIAA1614-like
LOC104914294	239	222	230	183	239	200	uncharacterized LOC104914294
S100A16	228	152	221	172	254	200	S100 calcium binding protein A16
ESRRG	157	236	184	223	187	200	estrogen-related receptor beta
GK	202	180	175	151	151	200	gap junction protein, delta 4, 40.1kDa
STEAP3	195	303	167	301	136	200	STEAP family member 3, metalloredutase
LOC104913075	115	375	135	259	123	200	dual specificity protein phosphatase 22-A-like
LOC100539302	335	194	301	162	243	199	inner centromere protein-like
PIP5K1C	259	224	251	222	239	199	phosphatidylinositol-4-phosphate 5-kinase, type I, gamma
LOC104909791	182	201	168	190	185	199	uncharacterized LOC104909791
ASRGL1	172	198	176	126	133	199	asparaginase like 1
LOC104911165	195	173	224	258	225	199	uncharacterized LOC104911165
LYRM5	220	216	218	215	201	199	LYR motif containing 5
LOC104915502	174	228	173	162	168	199	nucleotide exchange factor SIL1-like
PWWP2A	271	222	261	210	250	199	PWWP domain containing 2A
LOC100544491	251	165	230	145	186	199	rho guanine nucleotide exchange factor 10
LOC100547893	234	110	210	148	197	199	UDP-glucuronosyltransferase 1-1-like
SMPDL3A	206	154	209	201	267	199	sphingomyelin phosphodiesterase, acid-like 3A
ASB3	208	218	218	191	220	199	ankyrin repeat and SOCS box containing 3
LOC100544461	150	150	197	222	170	199	SLIT-ROBO Rho GTPase-activating protein 3
MB21D2	195	191	180	144	150	199	Mab-21 domain containing 2
LOC100542816	198	178	236	165	209	199	actin, cytoplasmic type 5
LOC100542745	193	250	179	314	178	198	cytochrome P450 27C1
TYW3	190	200	172	157	158	198	tRNA-yW synthesizing protein 3 homolog (S. cerevisiae)
TTC30B	178	170	191	196	184	198	tetratricopeptide repeat domain 30B
CCNJ	211	167	171	171	170	198	cyclin I
LOC100542442							
	211	180	206	167	188	198	pancreatic secretory granule membrane major glycoprotein GP2-like
RASL12	226	195	182	162	233	198	RAS-like, family 12
RPAIN	193	224	182	180	182	198	RPA interacting protein
LOC104914563	211	180	221	195	197	198	KAT8 regulatory NSL complex subunit 1-like
RFX2	225	316	248	229	196	198	regulatory factor X, 2 (influences HLA class II expression)
MKRN2OS	303	251	263	199	230	198	MKRN2 opposite strand
HDAC11	233	247	213	235	166	197	histone deacetylase 10
JMJD7	234	137	268	149	246	197	jumonji domain containing 6
METTL15	230	168	224	173	165	197	methyltransferase like 15
ZNF710	235	185	216	202	208	197	zinc finger protein 710
PRKCH	176	147	133	99	179	197	protein kinase C, eta
AHR	220	190	223	194	196	197	aryl hydrocarbon receptor
PDGFA	183	175	178	172	201	197	platelet-derived growth factor alpha polypeptide
ORC5	283	163	218	166	186	197	origin recognition complex, subunit 5
LOC104909458	215	189	209	156	182	197	nephrocystin-1-like
LOC100549869	185	256	190	230	193	196	solute carrier family 25 member 33-like
LOC104914744	212	161	208	172	183	196	dymeclin-like
REM1	220	370	193	233	241	196	RAS (RAD and GEM)-like GTP-binding 1
EHHADH	231	178	247	192	209	196	ets homologous factor
MAPK9	241	197	221	214	246	196	mitogen-activated protein kinase 9
CCDC30	207	180	185	175	213	196	coiled-coil domain containing 3
ACOT7	256	188	196	147	176	196	acyl-CoA thioesterase 7
DQX1	170	201	192	216	199	196	dihydropyrimidinase-like 5
ZNF385D	228	190	238	165	210	196	zinc finger protein 385D
ABHD6	223	180	199	158	203	196	abhydrolase domain containing 6
LOC100544288							
	291	274	217	148	156	196	solute carrier family 2, facilitated glucose transporter member 9
LOC100543103	196	154	182	165	184	196	folate receptor alpha-like
CNTN4	211	269	241	290	234	196	contactin 3 (plasmacytoma associated)
LOC104912983	134	223	145	214	164	195	uncharacterized oxidoreductase C663.06c-like
ZBED1	264	225	242	202	207	195	zinc finger, BED-type containing 1
SCRN2	226	221	218	244	215	195	secernin 2
SIRT4	113	189	131	195	141	195	sirtuin 4
SCFD2	242	164	220	178	188	195	sec1 family domain containing 2
GMEB1	200	183	207	197	197	195	GDP-mannose 4,6-dehydratase
LOC104916159	212	151	213	148	185	195	ribosome biogenesis protein BOP1-like
BBS4	222	247	233	245	228	195	Bardet-Biedl syndrome 4
KCTD10	288	198	256	196	211	195	potassium channel, subfamily V, member 2
TROVE2	273	185	239	194	200	194	TROVE domain family, member 2
LOC104912450	182	192	215	190	173	194	uncharacterized LOC104912450
FRMPD4	186	161	200	221	196	194	FERM and PDZ domain containing 3
F11R	216	168	205	159	204	194	coagulation factor X
ADCK1	220	148	182	144	146	194	aarF domain containing kinase 1
LOC104913098	215	194	217	262	238	194	E3 ubiquitin-protein ligase RNF123-like
LOC104913115	261	198	233	227	213	194	RNA-binding protein 6-like
FBXO8	167	173	184	193	202	194	F-box protein 5
LOC104914215	223	180	201	194	204	194	uncharacterized protein FLJ45252-like
MSANTD2	236	203	233	178	192	194	Myb/SANT-like DNA-binding domain containing 2
LOC100549000	286	165	245	158	201	194	dynein heavy chain 8, axonemal

LOC100543118	197	181	165	158	173	194	uncharacterized LOC100543114
LOC104911649	210	186	189	171	196	194	muskelin-like
LOC100541707	194	186	182	191	121	194	uncharacterized LOC100541702
CHD9	225	186	226	234	210	194	chromodomain helicase DNA binding protein 7
LOC100547794	187	175	152	159	136	193	melatonin receptor type 1C-like
LOC100538666	258	181	231	158	170	193	protein spire homolog 1-like
LOC104910484	80	158	222	59	132	193	collagen alpha-1(XII) chain-like
TFCP2L1	166	148	202	166	241	193	transcription factor CP2-like 1
FOXX1	206	228	206	275	197	193	forkhead box J2
LOC104912133	243	123	187	154	224	193	uncharacterized LOC104912133
ZMYM6NB	214	217	229	201	222	193	ZMYM6 neighbor
LOC104914321	210	216	205	170	196	193	zinc finger and BTB domain-containing protein 8A-like
LOC104910710	138	136	137	121	156	193	histone H2A-IV
CBY1	224	200	216	177	215	192	chromobox homolog 7
CDK10	224	217	207	173	182	192	cyclin-dependent kinase 1
LOC104913138	197	188	168	135	172	192	alpha/beta hydrolase domain-containing protein 14B-like
ABRACL	318	194	256	188	233	192	ABRA C-terminal like
ITGB8	99	136	120	175	254	192	integrin, beta 6
TLCD1	299	199	231	140	178	192	TLC domain containing 1
LOC104914337	236	172	237	185	223	192	microtubule-actin cross-linking factor 1-like
LOC104915567	224	158	186	190	157	191	scaffold attachment factor B1-like
LOC104915362	135	199	166	203	110	191	E3 ubiquitin-protein ligase TRIM36-like
PDE4D	196	211	205	164	190	191	phosphodiesterase 4D, cAMP-specific
ILDR2	235	200	203	199	199	191	immunoglobulin-like domain containing receptor 1
LOC104917553	229	198	220	228	235	191	NEDD4-binding protein 2-like 2
LOC100540242	215	175	191	194	167	191	probable C-mannosyltransferase DPY19L3
TPGS1	214	197	220	196	203	191	tubulin polyglutamylase complex subunit 1
PLEKHH2							pleckstrin homology domain containing, family H (with MyTH4 domain)
	200	170	199	216	269	191	member 2
MZT1	190	202	202	194	204	191	mitotic spindle organizing protein 1
LLGL2	204	240	220	231	191	190	lethal giant larvae homolog 1 (Drosophila)
TTLL6	217	184	214	161	166	190	tubulin tyrosine ligase-like family, member 6
F5	151	202	133	215	177	190	coagulation factor III (thromboplastin, tissue factor)
LOC104912361	269	186	224	136	150	190	cell division cycle 7-related protein kinase-like
PSMC3IP	244	168	207	119	155	190	PSMC3 interacting protein
LRP2BP	223	206	195	168	189	190	LRP2 binding protein
SLX4IP	215	166	220	149	166	190	SLX4 interacting protein
LOC104914900	197	161	200	152	128	190	uncharacterized LOC104914900
S1PR1	220	217	254	221	184	190	sphingosine-1-phosphate receptor 1
IL2RG	207	138	177	168	222	189	interleukin 2 receptor, beta
LOC104917206	245	164	224	202	210	189	uncharacterized LOC104917206
GPR116	150	247	148	227	180	189	G protein-coupled receptor 115
INPP5A	229	167	221	161	185	189	inositol polyphosphate-4-phosphatase, type II, 105kDa
LOC100545707	281	165	265	173	201	189	dmX-like protein 1
WNT5A	169	241	183	196	257	189	wingless-type MMTV integration site family, member 5A
LOC100551355	260	175	258	209	194	189	CD2-associated protein-like
LOC100542744	196	184	197	186	164	189	panetheinase-like
RNASEL							
	336	215	361	203	340	189	ribonuclease L (2',5'-oligoadenylate synthetase-dependent)
C1QTNF3	301	237	251	152	236	189	C1q and tumor necrosis factor related protein 2
C23H1orf159	205	169	221	201	191	189	chromosome 23 open reading frame, human C1orf158
SFXN5	186	164	175	177	185	189	sideroflexin 5
LOC100540511	103	216	176	320	150	189	zinc transporter ZIP11-like
LOC100546355	231	262	232	218	245	189	sodium channel protein type 2 subunit alpha-like
LOC104916931	214	220	201	221	234	189	uncharacterized LOC104916931
WISP1	192	205	265	119	157	189	WNT1 inducible signaling pathway protein 1
CCDC171	197	158	203	158	139	189	coiled-coil domain containing 170
FAM102A	226	196	224	191	256	189	family with sequence similarity 101, member B
LOC104912822							
	207	175	206	193	181	189	S phase cyclin A-associated protein in the endoplasmic reticulum-like
KLHL25	214	178	203	155	184	189	kelch-like family member 24
KCNK13	188	158	207	184	140	188	potassium channel, subfamily K, member 12
LBH	226	317	210	213	177	188	large tumor suppressor kinase 2
LOC104911801	205	133	190	220	166	188	poly [ADP-ribose] polymerase 14-like
HARBI1	201	167	181	165	177	188	hyaluronan and proteoglycan link protein 4
IDUA	156	152	183	163	123	188	iduronate 2-sulfatase
SYNJ2	279	230	247	197	221	188	synaptojanin 2
G6PC3	188	178	201	186	230	188	glucose-6-phosphatase, catalytic, 2
LOC104915336	126	133	162	141	116	188	uncharacterized LOC104915336
LOC104910474	197	154	183	188	175	188	PHD finger protein 20-like protein 1
METTL8	141	159	139	166	140	188	methyltransferase like 8
LOC100548322	183	150	187	168	184	188	pendrin
PHC3	195	176	196	174	143	188	polyhomeotic homolog 3 (Drosophila)
ANAPC13	204	225	200	183	179	188	anaphase promoting complex subunit 13
CWF19L2	178	156	178	172	138	188	CWF19-like 1, cell cycle control (S. pombe)
BBS9	266	176	226	157	167	188	Bardet-Biedl syndrome 9
DHX35	230	176	227	178	189	188	DEAH (Asp-Glu-Ala-His) box polypeptide 34
ZAR1L	126	163	143	141	171	188	zygote arrest 1-like
LOC104917203	179	185	174	198	129	188	E3 SUMO-protein ligase PIAS2 pseudogene

NIN	286	176	271	171	206	187	ninein (GSK3B interacting protein)
LOC100541423	263	171	251	169	175	187	delta and Notch-like epidermal growth factor-related receptor
LOC104911732	230	170	218	141	175	187	uncharacterized LOC104911732
CLMN	166	202	150	189	140	187	CDC-like kinase 4
PI4K2B	208	180	221	177	193	187	phosphatidylinositol 4-kinase type 2 beta
CCDC14	233	174	199	165	186	187	coiled-coil domain containing 138
TUFT1	362	352	302	219	236	187	tuftelin 1
LOC100541966	202	181	208	181	175	187	panetheinase-like
LOC104913644	158	147	131	164	143	187	kelch-like protein 9
RNF170	144	185	193	189	147	187	ring finger protein 170
LOC100542828	157	222	179	148	142	187	fibulin-1
NRAS	214	164	182	158	160	187	neuroblastoma RAS viral (v-ras) oncogene homolog
SETD4	164	162	182	173	136	187	SET domain containing 4
HYDIN	160	177	163	201	191	187	hyaluronoglucosaminidase 3
LOC104914856	179	184	197	204	154	186	5'-AMP-activated protein kinase catalytic subunit alpha-1
LOC104916993	319	243	293	275	222	186	filamin-C-like
LOC104911486	164	116	160	114	138	186	F-box only protein 7-like
SLC9A7	227	139	209	169	151	186	solute carrier family 9, subfamily A (NHE7, cation proton antiporter 7), member 7
COASY	221	230	180	188	210	186	centriolin
HS3ST1	255	266	240	176	202	186	heparan sulfate 2-O-sulfotransferase 1
B3GALT5	150	125	176	121	119	186	UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 5
PLAG1	196	174	182	211	175	186	pleiomorphic adenoma gene 1
DPH1	216	194	195	183	192	186	D4, zinc and double PHD fingers, family 3
CNTN1	227	285	217	295	277	186	ciliary neurotrophic factor
LOC104917250	220	138	189	152	167	186	serine/threonine-protein phosphatase 5-like
AP5S1	153	192	150	173	158	186	adaptor-related protein complex 5, sigma 1 subunit
LOC100540273	275	154	254	180	238	186	synapse-associated protein 1-like
TMEM100	174	197	150	185	159	186	transmembrane protein 100
NOL4L	240	200	212	173	204	186	nucleolar protein 4-like
PIGP	171	165	207	149	158	186	phosphatidylinositol glycan anchor biosynthesis, class P
LOC104911743	121	201	132	174	207	186	uncharacterized LOC104911743
LOC100541213	200	171	196	182	208	186	leucine-rich repeat-containing protein 40
IGF2BP1	225	150	237	159	191	185	insulin-like growth factor 2
ZNF451	237	185	227	201	220	185	zinc finger protein 451
LOC104913864	250	213	259	202	242	185	uncharacterized LOC104913864
TRIP13	324	151	249	155	195	185	thyroid hormone receptor interactor 13
LOC104911904	79	108	105	113	74	185	uncharacterized LOC104911904
LOC104912427	259	173	225	187	217	185	cytochrome P450 2J2-like
LOC104914835	199	168	199	205	172	185	NAD kinase 2, mitochondrial-like
CABIN1	210	182	190	209	175	185	calcium binding protein 39-like
LOC100540432	165	197	152	207	178	185	zinc finger protein 516
MITF	162	220	177	221	150	185	microphthalmia-associated transcription factor
LOC100538780	197	179	188	194	146	185	uncharacterized LOC100538779
MECOM	241	207	227	201	222	185	MDS1 and EVI1 complex locus
LOC100547373	207	188	196	140	123	185	double-stranded RNA-binding protein Staufen homolog 2-like
LOC104915831	253	164	230	190	203	185	choline transporter-like protein 2
SLC5A9	184	188	236	170	207	185	solute carrier family 5 (sodium/sugar cotransporter), member 9
LOC104913863	240	164	199	167	196	185	zinc finger ZZ-type and EF-hand domain-containing protein 1-like
LOC104914121	142	191	141	191	156	185	kinesin-like protein KIF18
TNFRSF9	223	184	200	123	148	185	tumor necrosis factor receptor superfamily, member 9
MAK	119	186	119	188	189	185	male germ cell-associated kinase
NADSYN1	133	116	150	139	136	185	NAD synthetase 1
LOC104911091	218	190	208	245	203	184	MAX gene-associated protein-like
ANGPT4	227	204	195	199	225	184	angiopoietin 4
LOC100549411	125	143	131	205	103	184	maternal embryonic leucine zipper kinase
LOC104916890	246	180	217	211	201	184	E3 ubiquitin-protein ligase synoviolin-like
C1HXorf36	210	165	207	173	193	184	chromosome 1 open reading frame, human CXorf30
WDR54	188	138	192	179	193	184	WD repeat domain 54
STARD5	230	155	213	138	189	184	StAR-related lipid transfer (START) domain containing 5
LOC104913625	214	170	208	164	202	184	zinc finger protein CKR1 pseudogene
LOC104911120	150	155	155	160	157	184	uncharacterized LOC104911120
TMEM246	188	157	205	151	158	184	transmembrane protein 246
NCOA3	206	174	192	215	178	184	nuclear receptor coactivator 3
NDUFA4	213	163	198	152	179	184	NADH dehydrogenase (ubiquinone) complex I, assembly factor 4
LOC104916508	210	159	206	164	175	184	probable ATP-dependent RNA helicase DDX23
CSRNP3	171	150	204	199	149	184	cysteine-serine-rich nuclear protein 2
CEP83	237	181	221	163	179	184	centrosomal protein 78kDa
MAMDC2	206	137	188	131	119	184	MAM domain containing 2
GRIN3A	242	150	206	148	139	184	glutamate receptor, ionotropic, N-methyl D-aspartate 2C
DFFA	221	218	218	194	214	184	Dexi homolog (mouse)
LOC100550530	265	221	335	220	275	183	N-acetylated-alpha-linked acidic dipeptidase 2
IGSF11	205	184	189	137	144	183	immunoglobulin superfamily, member 10

ACSL5	205	185	198	186	213	183	acyl-CoA synthetase long-chain family member 5
LOC100538841	256	220	228	192	172	183	homeobox protein Hox-A7
METTL3	294	173	253	184	193	183	methyltransferase like 3
TSPAN2	156	286	157	212	218	183	tetraspanin 2
SZT2	235	195	205	244	194	183	seizure threshold 2 homolog (mouse)
LOC104915932	303	185	263	130	172	183	melanoma-associated antigen G1-like
TIGD3	283	197	245	177	220	183	tigger transposable element derived 3
LOC104909519	165	187	156	186	149	183	atlastin-2-like
SORCS1	147	139	130	207	154	183	sortilin-related VPS10 domain containing receptor 1
LOC104915485	213	246	199	320	142	183	collagen alpha-5(IV) chain-like
LOC104909449	209	152	216	173	237	183	caseinolytic peptidase B protein homolog
LOC104912482	239	184	204	190	209	183	uncharacterized LOC104912482
SCUBE1	181	107	181	216	495	183	signal peptide, CUB domain, EGF-like 1
ZC2HC1A	180	184	212	242	173	183	zinc finger, C2HC-type containing 1A
PMS1	172	191	182	171	184	183	PMS1 postmeiotic segregation increased 1 (S. cerevisiae)
LOC104916585	390	518	566	356	176	183	uncharacterized LOC104916585
CSGALNACT1	206	184	206	177	158	183	colony stimulating factor 3 receptor (granulocyte)
LOC104913209	335	247	251	213	247	183	SLIT-ROBO Rho GTPase-activating protein 3
LOC104916108							
	221	168	173	140	172	183	chromosome unknown open reading frame, human C6orf136
ZMAT5	245	159	232	147	242	183	zinc finger, matrin-type 5
LOC104909467	199	163	176	196	188	182	translation initiation factor IF-2, mitochondrial-like
LOC100541679	80	315	51	396	49	182	caspase-8-like
DTNB							
	214	182	198	173	192	182	denticleless E3 ubiquitin protein ligase homolog (Drosophila)
KLHL8	234	148	175	175	228	182	kelch-like family member 7
LOC104912460	293	202	225	153	179	182	DNA repair and recombination protein RAD54-like
TXNDC16	161	164	191	157	148	182	thioredoxin domain containing 16
SOX11	286	201	253	177	222	182	SRY (sex determining region Y)-box 11
DNAH17	185	150	182	148	168	181	dynein, axonemal, heavy chain 14
LOC104910957							
	222	170	213	206	194	181	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase beta-2-like
CCDC109B	237	166	178	145	176	181	coiled-coil domain containing 108
LOC104915554	191	167	173	172	154	181	uncharacterized LOC104915554
TRAF3IP2	193	191	173	217	183	181	TRAF3 interacting protein 2
WNT5B	162	256	186	250	209	181	wingless-type MMTV integration site family, member 5B
XRRA1	188	187	200	156	164	181	X-ray radiation resistance associated 1
LOC100542574	202	168	213	212	179	181	zinc finger protein OZF-like
LOC104916486	161	195	159	157	151	181	dehydrogenase/reductase SDR family member 4-like
LOC104913523	284	131	245	124	330	180	uncharacterized LOC104913523
WDR60	175	174	208	168	153	180	WD repeat domain 60
DCUN1D3	190	177	179	169	187	180	DCN1, defective in cullin neddylation 1, domain containing 2
E2F5	178	154	182	149	178	180	E2F transcription factor 4, p107/p130-binding
C12H15orf61	223	189	205	165	195	180	chromosome 12 open reading frame, human C15orf59
STAP1	149	142	145	142	151	180	signal transducing adaptor family member 1
LOC104915054	138	122	170	167	115	180	focadhesin-like
LOC100542617	162	164	154	178	158	180	phospholipid-transporting ATPase ID-like
SCAMP1	199	168	211	182	180	180	secretory carrier membrane protein 1
CASP7	241	157	229	166	178	180	caspase 6, apoptosis-related cysteine peptidase
WDR13	196	166	160	185	183	179	WD repeat domain 13
LOC104916180	354	185	258	147	172	179	cell division control protein 6 homolog
RRNAD1	242	172	227	144	204	179	ribosomal RNA adenine dimethylase domain containing 1
ZDHHC23	211	183	190	154	183	179	zinc finger, DHHC-type containing 23
LOC100543474	228	148	211	102	134	179	collagen alpha-1(XXVIII) chain-like
SPTLC2	235	186	225	195	228	179	serine palmitoyltransferase, long chain base subunit 2
GAS8	197	185	200	195	167	179	growth arrest-specific 6
LOC104916749	205	163	189	156	172	179	zinc finger protein 664-like
LOC104910382	256	191	216	185	221	179	uncharacterized LOC104910382
LOC104912858	406	169	274	112	95	179	uncharacterized LOC104912858
OSGEP	154	171	188	160	175	179	O-sialoglycoprotein endopeptidase
PCSK2	189	203	187	197	157	179	proprotein convertase subtilisin/kexin type 2
FOXP4	308	194	258	155	193	179	forkhead box P2
LOC104911694	183	147	169	179	172	179	unconventional myosin-X-like
STX3	141	142	148	152	144	179	syntaxin 3
LOC100542170	147	158	161	182	158	179	DNA primase large subunit-like
CNRIP1	197	190	174	202	136	178	cannabinoid receptor 2 (macrophage)
LOC104916035	229	192	233	195	194	178	death domain-associated protein 6-like
LOC100550377	236	211	221	211	226	178	putative N-acetylated-alpha-linked acidic dipeptidase
RTKN2	153	152	166	164	123	178	rhotekin 2
LOC100547664	169	192	172	223	171	178	cadherin EGF LAG seven-pass G-type receptor 2
LOC104910185	151	172	161	131	248	178	uncharacterized LOC104910185
SH3GL3	273	123	196	133	170	178	SH3-domain GRB2-like 3
MAML3	211	190	194	178	140	178	mastermind-like 3 (Drosophila)
OSR1	231	177	166	145	176	178	odd-skipped related transcription factor 1
TTC8	167	168	185	179	166	178	tetratricopeptide repeat domain 8
LOC104913609	197	162	203	196	178	177	T-box transcription factor TBX3-like
TLL2	188	136	206	176	252	177	tolloid-like 2
IRS1	157	281	179	229	192	177	immunoresponsive 1 homolog (mouse)

PLEKHM1						pleckstrin homology domain containing, family M (with RUN domain)
LOC104912617	173	174	185	184	183	member 1
	221	169	197	198	201	LIM and senescent cell antigen-like-containing domain protein 2
LOC104910734	171	166	172	165	136	uncharacterized LOC104910734
LOC100548360	233	178	202	193	153	histone H2A deubiquitinase MYSM1
LSM11	206	179	191	165	161	LSM11, U7 small nuclear RNA associated
CCDC92	137	188	147	135	151	coiled-coil domain containing 91
LOC100549082	248	200	234	138	190	glutamate receptor ionotropic, NMDA 2A-like
CENPK	210	132	241	123	136	centromere protein I
FRMPD2	183	93	212	137	195	FERM and PDZ domain containing 1
LOC100544321	211	188	205	176	183	arylacetamide deacetylase-like 3
LOC104915511	169	171	164	192	141	UPF0505 protein C16orf62 homolog
GALC	190	183	188	175	127	galactose-3-O-sulfotransferase 4
GFOD2	210	193	201	181	202	glucose-fructose oxidoreductase domain containing 1
ANKLE1	194	168	204	142	149	ankyrin repeat and LEM domain containing 1
LOC104917099	220	204	203	227	190	histone-lysine N-methyltransferase 2D-like
LRCH2						
	183	168	191	207	159	leucine-rich repeats and calponin homology (CH) domain containing 2
LOC104909230	217	160	230	171	174	SPATS2-like protein
LOC104915241	304	226	265	182	222	uncharacterized LOC104915241
LOC104917120	187	181	148	231	190	neuroblast differentiation-associated protein AHNAK-like
POLE4	241	182	208	165	163	polymerase (DNA-directed), epsilon 4, accessory subunit
LOC100541905	198	137	201	152	151	putative tRNA pseudouridine synthase Pus10
TLE1						
	209	150	216	139	161	transducin-like enhancer of split 1 (E(sp1) homolog, Drosophila)
TRIL	161	135	150	155	125	TLR4 interactor with leucine-rich repeats
ZNF407	173	166	188	214	171	zinc finger protein 407
FAM20A	174	264	187	186	232	family with sequence similarity 208, member B
SLC25A10						solute carrier family 25 (mitochondrial carrier; dicarboxylate transporter), member 10
	182	179	175	148	174	176
LOC100542179	186	146	196	157	151	nucleolar RNA helicase 2
LOC100544832	222	120	193	180	177	chymotrypsinogen A-like
GIPC2	295	310	292	190	191	GIPC PDZ domain containing family, member 1
LOC100542725	216	150	183	136	188	growth arrest-specific protein 7-like
LOC104917111	204	140	207	168	186	chromodomain-helicase-DNA-binding protein 8-like
RNFT2	193	182	191	179	169	ring finger protein, transmembrane 2
CDADC1	232	152	208	176	206	CD99 molecule-like 2
WNK4	179	217	126	206	182	WNK lysine deficient protein kinase 4
CD99L2	171	186	183	194	214	CD99 molecule
USHBP1	165	147	173	132	170	Usher syndrome 1C binding protein 1
SPATA18	115	143	142	142	198	spermatogenesis associated 18
CCDC125	189	143	186	137	142	coiled-coil domain containing 124
CHL1	188	199	151	159	165	choline kinase alpha
TMCO4	202	157	172	156	162	transmembrane and coiled-coil domains 4
COG5	165	142	169	165	170	component of oligomeric golgi complex 4
LOC100544524	125	165	138	198	132	protein SCO1 homolog, mitochondrial
TMEM18	175	147	172	144	163	transmembrane protein 18
LOC104911687	157	165	177	122	147	serine/threonine-protein kinase 16-like
ASB11						
	57	172	104	213	82	ankyrin repeat and SOCS box containing 11, E3 ubiquitin protein ligase
LOC104914711	206	168	190	199	193	uncharacterized LOC104914711
LOC104912335	178	188	163	170	162	dynammin-3-like
LOC104911108	191	118	174	287	248	myosin-binding protein C, cardiac-type-like
LOC104911389	302	269	240	189	152	uncharacterized LOC104911389
MAD2L1BP	243	157	237	152	179	MAD2L1 binding protein
LOC100538808	171	184	173	153	168	aflatoxin B1 aldehyde reductase member 2-like
SPAG1	174	165	206	154	187	sperm associated antigen 1
NOS1	371	155	289	144	334	nitric oxide synthase 1 (neuronal)
DNAJC15	225	161	219	170	179	DnaJ (Hsp40) homolog, subfamily C, member 14
LOC104909740	164	175	156	176	146	plasma alpha-L-fucosidase-like
NOS2	145	161	178	157	182	nitric oxide synthase 2, inducible
LOC104909563	217	174	179	174	190	serine/arginine-rich splicing factor 7-like
LOC104912912	179	145	182	173	156	cytoplasmic dynein 1 light intermediate chain 2-like
ATF7	206	206	193	186	183	activating transcription factor 7
AGBL5	172	163	168	153	144	ATP/GTP binding protein-like 5
SLC1A2						solute carrier family 1 (glial high affinity glutamate transporter), member 2
	228	216	238	253	189	173
LOC104916842	247	154	218	155	174	carboxy-terminal kinesin 2-like
LOC100545726	191	204	205	243	209	olfactory receptor 52K1-like
GLI2	226	141	204	150	193	GLI family zinc finger 1
LOC104915352	213	148	200	199	168	transcription factor TFIIIB component B'' homolog
CZH5orf51	187	145	187	140	145	chromosome 2 open reading frame, human C5orf42
M1AP	122	180	133	156	95	meiosis 1 associated protein
PTBP3	172	168	210	179	140	polypyrimidine tract binding protein 3
LOC104913884	191	150	201	174	163	WD repeat-containing protein 81-like
ZNF142	196	172	201	162	192	zinc finger protein 142
LOC104910875	159	116	150	173	135	actin filament-associated protein 1-like
ZFAND2A	265	141	217	132	161	zinc finger, AN1-type domain 2A

NEDD9							
SLC8B1	204	241	215	167	174	173	neural precursor cell expressed, developmentally down-regulated 9
	154	191	154	197	173	172	solute carrier family 8 (sodium/lithium/calcium exchanger), member B1
LOC100547403	142	165	156	193	119	172	fatty acid amide hydrolase-like
LOC104917212	151	153	123	122	102	172	solute carrier family 27 (fatty acid transporter), member 2
LOC100541290	200	215	180	173	156	172	histone H2A, sperm-like
LOC104914761	186	123	183	117	131	172	nucleolar protein 6-like
INPP1	158	210	184	189	161	172	INO80 complex subunit D
LOC104910217	201	181	176	181	191	172	leucine-rich repeat-containing protein 16A-like
VSIG4	154	109	147	138	178	172	V-set and immunoglobulin domain containing 4
LOC104914986	168	114	195	111	127	172	uncharacterized LOC104914986
LOC104916377	196	183	189	121	170	172	ras association domain-containing protein 1-like
KLHL26	174	152	206	172	182	172	kelch-like family member 25
CRB2							
	82	91	112	112	205	172	crumbs family member 1, photoreceptor morphogenesis associated
LOC104914171	251	194	212	204	204	172	eukaryotic translation initiation factor 4 gamma 3-like
ALKBH2	167	163	151	153	153	172	alkB, alkylation repair homolog 2 (E. coli)
ST14	222	174	194	173	208	172	suppression of tumorigenicity 14 (colon carcinoma)
LOC104913831	136	183	148	146	154	172	5-hydroxytryptamine receptor 3A-like
CD40	273	214	230	156	188	171	CD4 molecule
LOC104912668	210	198	175	215	227	171	uncharacterized LOC104912668
SPHK1	267	169	202	163	228	171	sphingosine kinase 1
GALNT18	187	152	188	158	206	171	polypeptide N-acetylglucosaminyltransferase 16
TNFAIP8	172	147	181	160	186	171	tumor necrosis factor, alpha-induced protein 8
LOC104910076	168	179	173	145	145	171	little elongation complex subunit 1-like
TYSND1	256	180	205	161	189	171	trypsin domain containing 1
HMBOX1	183	165	182	189	169	171	histocompatibility (minor) 13
RRAD	130	318	140	184	76	171	Ras-related associated with diabetes
CAMLG	228	179	202	181	183	171	CaM kinase-like vesicle-associated
TJAP1	217	174	195	200	193	171	tight junction associated protein 1 (peripheral)
LOC100551044	227	166	197	187	171	171	nucleolar protein 10
LOC104916192	205	326	219	224	228	171	myelin protein PO-like
PCDH7	142	207	111	147	79	171	protocadherin 7
SBSPO1							
	277	175	204	152	145	171	somatostatin B and thrombospondin, type 1 domain containing
IDS	153	175	174	176	154	171	indoleamine 2,3-dioxygenase 2
ACYP1	171	168	155	156	204	170	acylphosphatase 1, erythrocyte (common) type
LOC100541750							
	101	121	95	173	107	170	prolyl-tRNA synthetase associated domain-containing protein 1-like
RFFL							
	170	147	160	185	163	170	ring finger and FYVE-like domain containing E3 ubiquitin protein ligase
EME2	168	188	142	179	147	170	essential meiotic structure-specific endonuclease 1
PGS1	226	165	195	175	155	170	phosphatidylglycerophosphate synthase 1
LOC100551088	272	345	205	291	449	170	actin, gamma-enteric smooth muscle
UBE3D	174	139	160	148	167	170	ubiquitin protein ligase E3D
VRK1	219	148	219	135	156	170	vaccinia related kinase 1
LOC104910097	111	246	129	386	175	170	uncharacterized LOC104910097
EXOC1	176	143	177	181	150	170	exonuclease 1
PPP4R4	149	154	162	152	152	170	protein phosphatase 4, regulatory subunit 4
MTCP1	172	169	199	175	180	170	mature T-cell proliferation 1
NUPL2	223	182	196	186	178	170	nucleoporin like 2
RTKL1	273	169	222	144	167	170	regulator of telomere elongation helicase 1
LOC104910456	273	148	228	182	204	169	uncharacterized LOC104910456
LOC104917058	219	164	204	182	167	169	interleukin enhancer-binding factor 3-like
LOC104916820	174	226	168	203	143	169	macrophage mannose receptor 1-like
LOC104913242	190	313	185	180	169	169	uncharacterized LOC104913242
B4GALT1							
	141	130	168	135	144	169	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 1
LOC100544881	185	227	136	239	208	169	MAP kinase-activated protein kinase 3
GGT7	106	163	163	214	142	169	gamma-glutamyltransferase 5
LOC104909307	189	158	190	193	169	169	E3 ubiquitin-protein ligase TRIM33-like
C1QTNF4	151	195	174	191	175	169	C1q and tumor necrosis factor related protein 3
TET3	176	187	198	195	163	169	tet methylcytosine dioxygenase 3
LOC104917495	168	164	183	172	156	168	uncharacterized LOC104917495
LOC104910268	212	150	207	174	187	168	tyrosine-protein phosphatase non-receptor type 2-like
LOC100542020	184	167	166	189	172	168	nucleolar RNA helicase 2-like
LOC104910410	256	135	189	125	188	168	uncharacterized LOC104910410
TLR3	257	168	246	194	301	168	toll-like receptor 3
USP30	190	157	175	174	174	168	ubiquitin specific peptidase 30
LOC104915117	157	164	177	137	138	168	aminopeptidase O-like
LOC104915981	144	149	164	174	155	168	E3 ubiquitin-protein ligase HERC2-like
LOC104913316	215	202	197	207	191	167	glucocorticoid receptor-like
UBE2QL1	251	219	223	174	172	167	ubiquitin-conjugating enzyme E2Q family-like 1
LOC104911795	181	136	200	132	154	167	leucine-zipper-like transcriptional regulator 1
LOC104915319	137	131	150	117	110	167	intracellular transport protein 74 homolog
LOC104914930	229	182	206	150	170	167	ralBP1-associated Eps domain-containing protein 2-like
LOC104913653	185	119	173	164	179	167	cysteine-rich tail protein 1-like
LOC104913140	228	177	201	168	261	167	alpha/beta hydrolase domain-containing protein 14A-like

ZFH3	211	163	191	181	164	167	zinc finger homeobox 3
ZBTB45	142	138	147	140	134	167	zinc finger and BTB domain containing 45
TLR7	158	123	164	179	160	167	toll-like receptor 7
MAPK8IP1	180	180	205	174	222	167	mitogen-activated protein kinase 8 interacting protein 1
GALNT14	148	152	129	152	108	167	polypeptide N-acetylgalactosaminyltransferase 11
LOC104916543							
	155	214	177	233	193	167	voltage-dependent calcium channel subunit alpha-2/delta-1-like
LOC100544081	224	171	198	149	167	167	keratin, type II cytoskeletal 1-like
LOC104917056							
	208	143	200	194	187	167	phosphatidylinositol 3,4,5-trisphosphate 5-phosphatase 2-like
LOC100550886	160	140	153	115	95	167	cystathionine beta-synthase-like
LOC100548381	199	221	183	193	254	167	valosin containing protein
FGGY	128	137	130	121	110	167	fibrinogen gamma chain
LOC100550511							
	175	153	180	160	175	166	alpha-N-acetylgalactosaminide alpha-2,6-sialyltransferase 2-like
IQCC	198	177	187	172	230	166	IQ motif containing B1
LOC104910760	134	151	143	153	137	166	cationic amino acid transporter 2-like
LOC100540591	148	149	176	160	141	166	fatty acyl-CoA reductase 1
PXK	149	177	168	202	186	166	PX domain containing serine/threonine kinase
WDFY4	226	159	223	138	175	166	WDFY family member 4
SPI1	177	136	170	200	199	166	Spi-1 proto-oncogene
LOC100541650	209	83	290	121	300	166	ADP-ribosylation factor-like protein 8A
TXNDC15	182	162	180	153	153	166	thioredoxin domain containing 15
LPAR6	205	164	179	167	193	166	lysophosphatidic acid receptor 6
LOC104912637	258	186	250	142	202	166	2-phosphoxylase phosphatase 1-like
LOC104915936	145	194	147	147	158	165	uncharacterized LOC104915936
KIAA0895	222	185	185	185	163	165	KIAA0753 ortholog
SWAP70	225	160	212	179	193	165	SWAP switching B-cell complex 70kDa subunit
ST3GAL4	181	179	175	154	195	165	ST3 beta-galactoside alpha-2,3-sialyltransferase 4
C3H8orf37	186	148	165	163	161	165	chromosome 3 open reading frame, human C8orf22
LOC104916369	251	165	270	170	199	165	ATP-binding cassette sub-family F member 1-like
C23H1orf50	128	159	149	150	130	165	chromosome 23 open reading frame, human C1orf174
ATP2B2	212	174	190	165	157	165	ATPase, Ca++ transporting, plasma membrane 2
LOC100547828	176	130	172	170	190	165	reticulon-4-interacting protein 1, mitochondrial-like
C1QTNF1	137	199	147	159	190	165	complement component 1, q subcomponent-like 4
ADAM11	115	105	106	153	76	165	ADAM metalloproteinase domain 11
LOC104915798	228	189	212	235	183	165	histone-lysine N-methyltransferase 2D-like
LOC100551128	189	168	238	136	147	165	cryptochrome-1-like
ABCC2							
	122	157	144	143	157	165	ATP-binding cassette, sub-family C (CFTR/MRP), member 2
LOC104913452	211	166	201	214	208	165	zinc finger CCH domain-containing protein 7A-like
LOC104909867	88	88	112	92	110	165	uncharacterized LOC104909867
NETO2	206	165	154	259	292	165	neuropilin (NRP) and tolloid (TLL)-like 2
LOC104911167	185	169	186	180	251	165	fibrinogen-like protein 1
PARD6G	208	176	175	169	160	165	par-6 family cell polarity regulator gamma
AGPAT5	207	143	196	201	227	165	1-acylglycerol-3-phosphate O-acyltransferase 5
LOC104913119	156	205	152	155	151	164	ubiquitin-like modifier-activating enzyme 7
REEP3	161	132	168	169	146	164	receptor accessory protein 3
MBOAT1	143	183	125	138	142	164	membrane bound O-acyltransferase domain containing 1
LOC104911030							phosphatidylinositol 4-phosphate 3-kinase C2 domain-containing subunit
	187	166	208	186	175	164	alpha-like
GLB1L	164	182	158	146	144	164	galactosidase, beta 1
LOC104917082	187	131	176	161	155	164	sericin-1-like
LOC100549851	219	140	176	158	185	164	lon protease homolog 2, peroxisomal
LOC104911807	179	154	169	146	160	164	tyrosine-protein phosphatase non-receptor type 4-like
SETD9	159	132	162	122	132	164	SET domain containing 9
KIAA1671	245	291	235	217	170	164	KIAA1644 ortholog
TRAPPC13	155	132	169	156	127	164	trafficking protein particle complex 13
LOC104911276	156	155	148	142	147	164	uncharacterized LOC104911276
KLHL36	174	144	192	182	177	164	kelch-like family member 35
LOC104916712	162	213	157	145	150	164	putative N-acetyltransferase 8B
LOC104916374							evolutionarily conserved signaling intermediate in Toll pathway,
	209	170	174	147	146	164	mitochondrial-like
LOC100550348	150	138	148	128	122	164	leucine-rich repeat-containing protein 41
GAL3ST4	129	176	119	166	127	164	galactose-3-O-sulfotransferase 2
CTIF	204	163	194	173	185	163	collagen triple helix repeat containing 1
LOC104911166	45	88	101	135	94	163	uncharacterized LOC104911166
LOC100547818	179	179	181	159	148	163	E3 ubiquitin-protein ligase TRIM39-like
SODS3	171	215	160	117	151	163	suppressor of cytokine signaling 3
CDYL	185	171	171	176	171	163	caudal type homeobox 1
METTL20	186	146	183	119	198	163	methyltransferase like 20
LOC100549197							
	196	133	177	152	168	163	pseudouridine-metabolizing bifunctional protein C1861.05-like
PLEKHA2							pleckstrin homology domain containing, family A (phosphoinositide
	197	133	180	146	192	163	binding specific) member 2
LOC104917204	217	122	184	138	184	163	reticulon-3 pseudogene
PFKFB2	192	121	172	157	186	163	6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 2
LOC104913365	108	191	142	181	145	162	uncharacterized LOC104913365
MAP1LC3C	170	189	127	135	158	162	microtubule-associated protein 1 light chain 3 gamma

GCNT7	132	116	118	156	155	162	glucosaminyl (N-acetyl) transferase 4, core 2
TTC39C	186	134	183	129	152	162	tetratricopeptide repeat domain 39C
SPIDR	195	161	190	140	124	162	scaffolding protein involved in DNA repair
GLDN	225	298	186	150	192	162	glycine dehydrogenase (decarboxylating)
LOC104909491	222	138	207	163	165	162	exportin-1-like
ORAI2	178	155	144	152	133	162	ORAI calcium release-activated calcium modulator 2
RMDN2	140	133	142	148	180	162	regulator of microtubule dynamics 2
SMOX	123	170	159	235	145	162	spermine oxidase
TBC1D16	185	210	178	217	212	162	TBC1 domain family, member 16
KLHL17	161	163	131	124	148	162	kelch-like family member 15
LOC104910257	165	176	168	172	166	162	receptor-type tyrosine-protein phosphatase mu-like
SPATS2L	184	129	193	159	139	162	spermatogenesis associated, serine-rich 2-like
SGSH	161	143	128	141	160	162	N-sulfoglucosamine sulfohydrolase
SLC22A5							
	212	152	192	167	211	162	solute carrier family 22 (organic cation/carnitine transporter), member 5
LOC104917600	183	148	161	146	144	162	paraspeckle component 1
SLC30A7	218	133	205	163	194	162	solute carrier family 30 (zinc transporter), member 7
B3GNT9							
	240	155	208	153	193	162	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 9
CTSS	222	153	206	178	248	161	cathepsin O
LOC100545470	140	211	153	303	131	161	sulfotransferase 6B1-like
LOC100541200	101	157	112	169	112	161	lymphocyte antigen 6E-like
LOC100542863	198	151	175	151	148	161	cytochrome b561 domain-containing protein 2
LOC100549353	149	131	171	149	128	161	FAT atypical cadherin 3
MSRA	134	152	154	161	154	161	methionine sulfoxide reductase A
CCDC34	182	164	195	162	162	161	coiled-coil domain containing 33
COLEC10	199	192	204	148	199	161	colorectal cancer associated 2
DCLRE1C	167	143	165	153	158	161	DNA cross-link repair 1B
CFD	104	197	97	242	127	161	cilia and flagella associated protein 99
HIP1R	205	175	205	150	184	161	huntingtin interacting protein 1
TBX4	149	132	151	116	166	160	T-box 4
PAPSS2	205	202	218	144	202	160	3'-phosphoadenosine 5'-phosphosulfate synthase 2
NSUN3	160	122	154	108	98	160	NOP2/Sun domain family, member 3
IL6R	205	192	203	169	204	160	interleukin 6
APOPT1	171	140	170	133	194	160	apoptogenic 1, mitochondrial
LOC104915229	154	139	196	169	145	160	uncharacterized LOC104915229
NPL							
	166	159	180	167	187	160	N-acetylneuraminate pyruvate lyase (dihydrodipicolinate synthase)
ARHGAP6	178	199	200	168	159	160	Rho GTPase activating protein 6
SCRN1	177	150	180	153	168	160	secernin 1
LOC104915313	147	124	148	194	140	160	round spermatid basic protein 1-like protein
LOC104916516	152	150	153	134	134	160	uncharacterized LOC104916516
ANGPTL1	140	144	194	154	147	160	angiopoietin-like 1
LOC100549374	180	141	194	127	166	160	E-selectin-like
SULT4A1	175	146	176	117	153	160	sulfotransferase family 4A, member 1
DPP6	90	103	133	151	182	160	dolichyl-phosphate mannosyltransferase polypeptide 3
DSTYK	178	175	143	176	174	160	destrin (actin depolymerizing factor)
GDNF	140	142	152	181	77	160	GDP dissociation inhibitor 2
HAS2	161	162	179	135	161	160	histidyl-tRNA synthetase
LOC104913288	178	189	186	114	289	160	uncharacterized LOC104913288
RNF213	215	174	202	273	217	160	ring finger protein 213
CLGN	173	80	214	120	263	159	C-type lectin domain family 3, member B
FGF12	272	149	222	160	200	159	fibroblast growth factor 10
LNPEP	77	183	123	264	95	159	leukemia NUP98 fusion partner 1
HEYL							
	181	154	156	145	152	159	hes-related family bHLH transcription factor with YRPW motif 2
LOC104916305	143	85	173	116	132	159	sporozoite surface protein 2-like
DISC1	154	177	156	205	137	159	DIS3 like 3'-5' exoribonuclease 2
AGO2	204	163	175	170	154	159	argonaute RISC catalytic component 2
SLC3A1							
	129	151	153	136	153	159	solute carrier family 3 (amino acid transporter heavy chain), member 1
LOC100550622	275	176	193	240	204	159	microtubule-actin cross-linking factor 1, isoforms 1/2/3/5
LOC104912802	177	154	149	175	158	159	transmembrane protein C15orf27-like
LOC100546688	216	167	201	131	168	159	bactericidal permeability-increasing protein-like
C13H16orf87	189	148	200	148	165	159	chromosome 13 open reading frame, human C16orf74
LOC104917417	149	160	175	156	149	159	basic immunoglobulin-like variable motif-containing protein
SEMA3B							
	180	227	177	161	143	159	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3B
FANCB	180	128	158	132	141	159	Fanconi anemia, complementation group A
ZNF618	194	160	191	187	170	159	zinc finger protein 618
ATP5S							
	153	172	156	142	134	159	ATP synthase, H+ transporting, mitochondrial Fo complex, subunit s (factor B)
LOC100543611	102	106	121	124	119	159	nucleolar pre-ribosomal-associated protein 1
SERINC5	156	118	163	141	140	159	serine incorporator 5
CLN5	187	147	185	148	167	159	CXADR-like membrane protein
LOC104914242	185	148	164	124	158	159	uncharacterized LOC104914242
LOC104909328	226	173	181	162	161	158	collagen alpha-1(XI) chain-like
LOC104912939	226	165	190	141	134	158	borealin-2
IRF1	253	176	185	217	189	158	iron-responsive element binding protein 2

LOC104911507	202	167	201	180	202	158	raftlin
RASGRP1							
	149	148	140	166	152	158	RAS guanyl releasing protein 1 (calcium and DAG-regulated)
MFS08	131	149	167	135	150	158	major facilitator superfamily domain containing 8
LHPP	163	141	143	129	166	158	lipoma HMGIC fusion partner-like 5
CCDC82	176	187	204	166	156	158	coiled-coil domain containing 81
LOC100538693							inositol hexakisphosphate and diphosphoinositol-pentakisphosphate
	187	134	149	159	169	158	kinase 1-like
LOC104910138	159	152	163	158	127	158	uncharacterized LOC104910138
LOC104916254							TATA box-binding protein-associated factor RNA polymerase I subunit C-
	177	151	150	123	134	158	like
KIF9	138	140	177	170	165	158	kinesin family member 7
MEPCE	200	122	172	128	149	158	methylphosphate capping enzyme
ESR1	123	160	113	213	143	158	espin-like
KIAA1033	157	133	150	180	153	158	KIAA1024-like ortholog
HEPH	142	191	150	182	145	157	HEPACAM family member 2
LOC100546134	213	139	193	184	170	157	COBW domain-containing protein 2-like
COLQ	216	283	189	217	233	157	collagen beta(1-O)galactosyltransferase 2
METTL25	95	139	147	154	153	157	methyltransferase like 25
LOC104913359	213	157	165	128	128	157	zinc finger protein 501-like
LOC104909945	129	150	159	147	210	157	tubulointerstitial nephritis antigen-like
JAKMIP2	206	128	176	148	184	157	Janus kinase 3
TSHZ1	194	157	174	166	162	157	teashirt zinc finger homeobox 1
MUTYH	214	159	198	105	119	157	mutY homolog
CNNM2							
	201	163	188	151	186	157	cyclin and CBS domain divalent metal cation transport mediator 1
ATG5	198	133	196	142	152	157	autophagy related 5
PRKG2	169	200	167	161	150	157	protein kinase, cGMP-dependent, type II
LOC104910843	156	138	185	146	123	157	DNA excision repair protein ERCC-6-like 2
LOC104910842	158	138	186	137	126	157	DNA excision repair protein ERCC-6-like 2
PPT2	189	186	188	174	164	157	palmitoyl-protein thioesterase 2
LOC100542822	193	167	214	201	226	156	histone H2A.J
ALG14	135	126	113	128	142	156	ALG14, UDP-N-acetylglucosaminyltransferase subunit
LOC104913150	171	139	185	131	158	156	FYVE, RhoGEF and PH domain-containing protein 3-like
LOC100550253	177	115	151	122	154	156	olfactory receptor 12D2-like
B4GALT3							
	210	180	189	171	200	156	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 3
LOC104916308	174	159	155	131	161	156	lysosomal alpha-mannosidase-like
LOC100546910	200	139	188	163	170	156	piezo-type mechanosensitive ion channel component 2
NKX6-3	25	58	82	125	128	156	NK6 homeobox 3
SLC38A9	159	136	180	156	130	156	solute carrier family 38, member 9
HPDL	176	146	180	158	194	156	4-hydroxyphenylpyruvate dioxygenase
LOC104915835	205	142	162	122	158	156	NAD-dependent malic enzyme, mitochondrial-like
EXO1	286	160	250	147	157	156	exonuclease 3'-5' domain containing 3
LOC100545410	170	148	194	171	179	156	antigen peptide transporter 1-like
KCNE4							
	163	252	161	205	188	156	potassium voltage-gated channel, Isk-related family, member 3
PCBD1							pterin-4 alpha-carbinolamine dehydratase/dimerization cofactor of
	236	140	184	155	155	156	hepatocyte nuclear factor 1 alpha
ZBTB42	131	124	139	156	199	156	zinc finger and BTB domain containing 42
ST8SIA5							
	151	139	134	143	124	156	ST8 alpha-N-acetyl-neuraminidase alpha-2,8-sialyltransferase 5
MAPK11	184	125	158	150	151	156	mitogen-activated protein kinase 11
LOC104915207	172	165	153	137	149	156	uncharacterized LOC104915207
UNC5A	156	149	130	137	143	156	unc-5 homolog A (C. elegans)
FLRT3	166	183	201	149	147	156	fibronectin leucine rich transmembrane protein 2
LOC100550516	177	113	150	84	96	156	adenosine receptor A1
DFNA5							DNA fragmentation factor, 40kDa, beta polypeptide (caspase-activated
	144	142	169	131	97	156	DNase)
NQO2	201	113	183	112	173	156	NAD(P)H dehydrogenase, quinone 2
SLC25A44	254	190	187	200	227	156	solute carrier family 25, member 44
NFKBIE							nuclear factor of kappa light polypeptide gene enhancer in B-cells
	261	167	243	183	249	155	inhibitor, epsilon
FAM84B	144	137	122	144	111	155	family with sequence similarity 84, member A
TAF4B							TAF4b RNA polymerase II, TATA box binding protein (TBP)-associated
	186	122	164	121	122	155	factor, 105kDa
LOC100547793	148	214	151	180	155	155	transmembrane protein 121-like
LOC104914699	208	156	231	173	191	155	transcription factor 4-like
HSPA12A	166	130	151	149	143	155	heat shock protein 90kDa beta (Grp94), member 1
TYW1	199	138	189	152	168	155	tRNA-yW synthesizing protein 1 homolog (S. cerevisiae)
WASF3	182	173	192	180	223	155	WAS protein family, member 3
RCAN1	214	359	195	251	185	155	regulator of calcineurin 1
TBCEL	175	132	162	155	138	155	tubulin folding cofactor E-like
LOC100543979	204	154	219	161	173	155	connective tissue growth factor
LOC104916998	145	157	144	203	148	155	ryanodine receptor 1-like
LOC100540051	137	125	107	88	119	155	histone H2B 1/2/3/4/6
CAMKMT	137	126	163	116	138	155	calcium/calmodulin-dependent protein kinase kinase 2, beta
LOC104916927	180	127	160	149	136	155	procollagen galactosyltransferase 1-like
LOC100542184	189	168	198	161	153	155	gonadotropin-releasing hormone II receptor-like

LOC104913979							
SLC28A2	145	121	156	134	156	155	ubiquinol-cytochrome-c reductase complex assembly factor 1-like solute carrier family 28 (concentrative nucleoside transporter), member 2
	195	186	178	139	170	155	
LOC104914530	247	96	223	147	270	155	uncharacterized LOC104914530
LOC104917594	206	140	196	158	175	155	probable ATP-dependent RNA helicase DDX10
IPCEF1	218	268	169	183	144	154	inositol hexakisphosphate kinase 3
LOC104916146	200	114	163	150	160	154	extensin-like
LOC104917254	176	179	189	166	151	154	uncharacterized LOC104917254
LOC104914842	141	110	150	169	121	154	NIPBL, cohesin loading facto
LOC104909482	224	133	193	107	134	154	uncharacterized LOC104909482
LOC100548778	163	139	168	123	147	154	histone-binding protein RBBP4
LOC104911019	151	121	145	157	130	154	Hermansky-Pudlak syndrome 5 protein-like
LOC104910748	194	161	210	159	179	154	vascular endothelial growth factor receptor 2-like
LOC104912081	158	152	174	169	155	154	dedicator of cytokinesis protein 1-like
SLC41A2	189	150	169	145	205	154	solute carrier family 41 (magnesium transporter), member 2
ARNT2	219	143	212	147	178	154	aryl-hydrocarbon receptor nuclear translocator 2
LOC104916863	158	169	143	185	148	154	plectin-like
C7	163	372	208	296	199	154	chromosome 6 open reading frame, human C9orf152
MGAT4A							mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-
	154	132	147	148	148	154	acetylglucosaminyltransferase, isozyme A
RAP2B	161	153	151	154	148	154	RAP2B, member of RAS oncogene family
SNX18	157	148	178	145	125	154	sorting nexin 18
PRICKLE4	137	173	179	144	166	154	prickle homolog 4 (Drosophila)
C4H4orf47	155	148	156	118	134	153	chromosome 4 open reading frame, human C4orf46
LOC104912621	126	119	142	140	113	153	rho guanine nucleotide exchange factor 4-like
LOC104913893							S-adenosyl-L-methionine-dependent tRNA 4-demethylwyosine synthase-like
	155	120	161	125	165	153	
ERG	171	137	186	150	146	153	epiregulin
LOC100549737	176	155	166	128	145	153	hepatoma-derived growth factor-related protein 3
LOC104914159	115	117	145	162	125	153	zinc finger protein castor homolog 1-like
RAD51B	177	137	183	150	145	153	RAD51 paralog B
LOC100546747	183	146	191	162	136	153	interleukin-17A-like
MAP9	182	131	178	146	132	153	microtubule-associated protein 9
LOC104909376	208	134	164	151	150	153	centrosomal protein KIAA1731 homolog
ICK	193	146	179	145	180	153	islet cell autoantigen 1, 69kDa
LOC100541896							
	82	111	80	104	111	153	transient receptor potential cation channel subfamily M member 3-like
CEP19	191	155	201	139	199	153	centrosomal protein 170B
LOC104912652	142	158	176	175	163	153	cohesin subunit SA-1-like
LOC104911837							
	141	146	131	164	103	153	von Willebrand factor D and EGF domain-containing protein-like
WDR34	158	123	192	139	176	153	WD repeat domain 34
LOC104911101							
	186	150	164	187	166	153	activating molecule in BECN1-regulated autophagy protein 1
GPR27	298	154	204	108	138	153	G protein-coupled receptor 26
SIX4	115	149	136	203	108	152	SIX homeobox 4
LOC100550331	146	146	147	141	149	152	inversin
ANGPTL5	95	229	232	124	134	152	angiopoietin-like 5
CREG2	95	148	108	135	84	152	cellular repressor of E1A-stimulated genes 1
TGIF2	175	152	188	132	131	152	TGFB-induced factor homeobox 2
NKD1	162	115	193	75	105	152	naked cuticle homolog 1 (Drosophila)
LRP8							low density lipoprotein receptor-related protein 8, apolipoprotein e receptor
	201	88	147	93	104	152	
LOC104912452	153	126	181	183	157	152	FAS-associated factor 1-like
POLR3K							
	161	165	159	176	167	152	polymerase (RNA) III (DNA directed) polypeptide K, 12.3 kDa
LOC104909863	160	126	152	152	161	152	sine oculis-binding protein homolog
SLC39A9	214	138	182	151	167	152	solute carrier family 39, member 9
LOC100551377	151	149	160	137	125	152	histamine H3 receptor-like
LOC100551401	137	107	149	130	107	152	SH3 domain-containing kinase-binding protein 1
LOC104909261	166	116	178	96	206	152	interleukin-12 receptor subunit beta-2-like
IGF2	202	133	171	120	158	152	insulin-like growth factor 1 receptor
PLTP	142	145	145	145	147	152	phospholipid transfer protein
LOC104913862	222	136	195	140	187	152	uncharacterized LOC104913862
LOC104910355	162	119	168	153	170	152	uncharacterized LOC104910355
LOC100550445	102	122	116	104	93	152	rho-related BTB domain-containing protein 1
LOC104909565	271	380	202	220	122	152	uncharacterized LOC104909565
CMTM8	166	135	137	131	142	152	CKLF-like MARVEL transmembrane domain containing 7
NEIL3	228	153	202	135	127	152	nei endonuclease VIII-like 3 (E. coli)
LOC104911632	146	167	142	150	93	152	transcription intermediary factor 1-alpha-like
MAP10	162	133	173	113	113	152	microtubule-associated protein 10
PIGL	152	159	157	180	169	152	phosphatidylinositol glycan anchor biosynthesis, class L
LRP4	168	148	153	124	102	152	low density lipoprotein receptor-related protein 4
TMEM220	157	146	170	144	163	151	transmembrane protein 220
LOC100541211	176	139	182	151	136	151	transforming acidic coiled-coil-containing protein 2
LOC104913496	241	135	177	113	176	151	fascin pseudogene
AHI1	177	169	157	177	143	151	Abelson helper integration site 1
TMEM216	180	170	166	128	151	151	transmembrane protein 216

LOC100540589	162	129	149	151	132	151	adhesion G protein-coupled receptor B1
LOC104910939	152	132	158	167	157	151	palmitoyltransferase ZDHHC13-like
ENTPD1	218	157	197	171	194	151	ENTH domain containing 2
LOC100538358	176	124	158	119	133	151	cytochrome c oxidase assembly factor 5
LOC104912695	131	174	171	170	157	151	uncharacterized LOC104912695
STRN	131	145	144	195	137	151	striatin, calmodulin binding protein
LOC104914811	169	117	140	151	140	151	gamma-secretase subunit APH-1A-like
LOC104909238	175	147	167	160	162	150	uncharacterized LOC104909238
AMPD2	199	148	196	165	184	150	adenosine monophosphate deaminase 2
GAREM	197	134	205	149	169	150	GAR1 ribonucleoprotein
C12H15orf39	151	177	134	162	185	150	chromosome 12 open reading frame, human C15orf26
LOC104912471	154	112	166	127	160	150	translation initiation factor eIF-2B subunit gamma-like
ANKDD1A	172	140	153	135	137	150	ankyrin repeat and death domain containing 1A
EPGN	149	121	152	129	157	150	ependymin related 1
DOLK	166	151	151	138	113	150	docking protein 7
LOC100541881	97	118	224	156	86	150	BTB/POZ domain-containing protein KCTD5-like
STK36	153	145	187	152	163	150	serine/threonine kinase 36
LOC104911443	148	129	152	173	192	150	glycosyltransferase-like protein LARGE1
SLC16A9	123	104	164	142	148	150	solute carrier family 16, member 9
LOC100542602	144	153	163	161	146	150	annexin A8
SLC16A6	92	85	99	98	156	149	solute carrier family 16, member 6
LOC100541214	168	184	157	202	173	149	interferon-induced guanylate-binding protein 1-like
METAP1D	190	131	202	124	149	149	methionyl aminopeptidase type 1D (mitochondrial)
LOC104917237	168	175	162	148	147	149	SH3 and multiple ankyrin repeat domains protein 3-like
ABTB2	176	133	179	124	169	149	ankyrin repeat and BTB (POZ) domain containing 2
LOC104914753	143	126	146	125	100	149	ectopic P granules protein 5 homolog
HHEX	171	135	179	134	158	149	hedgehog acyltransferase-like
CENPW	191	122	191	114	134	149	centromere protein U
TUBB1	239	149	136	178	208	149	tubulin, beta 1 class VI
COL24A1	94	162	131	138	108	149	collagen, type XXIII, alpha 1
SLC46A1	139	127	147	157	115	149	solute carrier family 46 (folate transporter), member 1
TPBG	232	174	216	139	243	149	trophoblast glycoprotein
LOC104912907	140	102	152	132	148	149	cadherin-11-like
PPAPDC1B							
	171	126	159	116	128	149	phosphatidic acid phosphatase type 2 domain containing 18
WDR18	225	147	208	149	154	149	WD repeat domain 18
LOC104909793	113	179	123	242	105	149	laminin subunit alpha-2-like
N4BP3	232	168	200	160	168	149	NEDD4 binding protein 3
TJP3	118	179	137	178	150	149	tight junction protein 3
MGLL	131	147	107	142	123	149	monoglyceride lipase
IGHMBP2							
	169	136	166	170	151	149	immunoglobulin-like and fibronectin type III domain containing 1
LOC104916228	233	137	187	162	193	148	uncharacterized LOC104916228
TJP1	182	143	198	188	143	148	tight junction protein 1
LOC100541592	108	130	147	137	100	148	tubulin alpha-1A chain pseudogene
LOC104914204	169	169	139	134	141	148	E3 ubiquitin-protein ligase TRIM62-like
LOC104913353	125	150	142	144	100	148	uncharacterized LOC104913353
LRP3	199	131	165	143	136	148	low density lipoprotein receptor-related protein 3
RIN3	186	129	177	160	185	148	Ras and Rab interactor 3
CITED4							Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 2
	157	113	172	141	156	148	uncharacterized LOC104914670
LOC104914670	193	147	191	122	138	148	ovarian tumor suppressor candidate 2
OVCA2	166	130	132	124	122	148	serine/threonine-protein kinase tousled-like 1
LOC104911776	170	159	180	177	175	148	uncharacterized LOC104913690
LOC104913690	175	147	155	120	132	147	uncharacterized LOC104915542
LOC104915542	137	147	118	137	138	147	uncharacterized LOC104915221
LOC104915221	144	243	152	222	110	147	UPF0606 protein KIAA1549-like
LOC104909357	160	129	187	153	151	147	ras GTPase-activating protein 1
LOC104915269	164	116	151	143	121	147	uncharacterized LOC104909638
LOC104909638	168	154	133	131	158	147	protein Shroom4-like
LOC104912140	194	144	162	156	169	147	receptor (G protein-coupled) activity modifying protein 3
RAMP3	157	109	171	123	127	147	uridine phosphorylase 2
UPP2	127	115	132	156	120	147	tetraspanin 13
TSPAN13	151	124	120	132	123	147	uncharacterized LOC104909594
LOC104909594	177	171	155	145	166	147	EPH receptor B6
EPHX1	290	163	235	198	182	147	BPI fold-containing family C protein-like
LOC100540428	172	160	195	168	136	147	uncharacterized LOC104916268
LOC104916268	179	171	148	134	152	147	pre-B-cell leukemia homeobox 1
PBX1	139	124	126	152	129	147	
LOC104916289							
	117	135	138	117	124	146	amyloid beta A4 precursor protein-binding family B member 1-like
LOC100548437	172	152	144	174	122	146	cytochrome P450 2K1-like
CCDC173	132	140	155	143	173	146	coiled-coil domain containing 172
RHBDD1	135	121	120	124	110	146	rhomboid domain containing 1
ZBTB14	176	153	190	147	144	146	zinc finger and BTB domain containing 14
LOC104916072	161	159	120	179	166	146	protein NDRG2-like
LOC100545905	159	140	138	153	138	146	vesicle-associated membrane protein 2-like
IFT140	168	140	152	119	128	146	intraflagellar transport 122

KCNB1						potassium voltage-gated channel, shaker-related subfamily, beta member 2
DFFB	141	142	151	141	94	146
RASSF8	131	128	144	115	118	146
	155	138	130	150	109	146
SHE	166	161	169	138	191	146
CHRFAM7A	442	127	373	191	287	146
LOC100549648	142	111	128	121	141	146
MPND	82	246	84	164	132	146
LOC104912791	219	147	185	241	192	146
IFT43	158	150	164	125	147	146
LOC104914218	224	163	210	150	216	146
BACE2	153	170	157	163	152	146
LOC104912941	59	91	73	90	89	146
RRH	184	114	157	89	134	146
FAM63B	149	131	151	125	115	146
CXCR4	144	137	124	145	142	146
LOC104913766	160	238	133	190	147	145
FILIP1	115	173	125	193	141	145
PTCHD3	197	130	169	154	180	145
KIAA0556	138	156	148	162	130	145
LOC100544408	182	180	163	169	187	145
REL	152	129	140	125	135	145
NAPB	203	142	236	138	161	145
LOC100540743	151	150	192	167	123	145
DKK2	85	110	86	137	120	144
YIPF4	148	129	148	149	147	144
LOC104910558	161	142	153	129	133	144
PLEK	136	116	123	158	137	144
LOC104916608	161	149	154	142	165	144
PQLC2	155	150	164	159	176	144
SH3GLB2	143	145	149	136	137	144
MOXD1	188	227	173	126	181	144
HYAL3	141	148	127	182	152	144
LOC100546802	160	147	170	155	157	144
LOC100550986	175	150	159	195	138	144
CHDH	185	136	182	135	131	144
LOC100545215	140	121	146	157	140	144
TMEM71	245	136	206	159	233	143
VSNL1	123	174	164	146	170	143
OXR1	136	121	130	117	156	143
CCDC84	149	136	139	121	127	143
LOC104912284	116	113	161	114	127	143
FAM126B	125	136	122	137	128	143
LOC104910058	58	80	80	92	70	143
LOC104915185	167	141	170	148	117	143
ZNF384	162	141	148	160	139	143
OVCH2	129	127	125	133	159	143
MPP4						
	162	141	148	136	178	143
LOC100551134	200	141	164	160	146	143
LOC104917019	209	172	176	110	149	143
LOC100548247	168	128	147	116	140	143
CREB5	167	203	176	200	180	143
GPR162	182	162	187	119	153	143
LOC100550490	161	144	143	93	94	143
LRRC49	166	147	146	151	128	142
FOXP2	173	155	185	147	164	142
PLAU	147	155	134	140	115	142
TRAF3IP1	143	117	145	125	125	142
ASAP2	171	134	149	149	125	142
LOC104914659	246	215	147	114	220	142
CZH5orf30	161	143	174	130	150	142
LOC104910909	148	133	137	196	155	142
DRC7	226	252	317	190	476	142
NFIA	172	130	165	133	161	142
LOC104909478	160	139	149	138	152	142
MILR1	128	130	141	139	137	142
LOC100541742	126	124	135	104	128	142
LOC104909666	170	110	155	93	129	142
LOC100538692						
	174	140	145	175	147	142
TBXA2R	158	156	163	133	155	142
LOC104909309	110	118	139	133	98	142
LOC104912700	124	114	160	120	148	141
LOC100542004	154	135	149	154	125	141
LOC100538773	199	119	187	121	129	141
RHOG	180	114	162	150	187	141
FTSJ2	141	129	141	131	161	141
						fat mass and obesity associated

LOC104914990							
	156	100	201	85	124	141	pentatricopeptide repeat-containing protein 2, mitochondrial-like
LOC104915498	219	147	204	131	162	141	solute carrier family 12 member 2-like
LOC104909574	140	172	117	132	119	141	uncharacterized LOC104909574
LOC100540007	213	259	194	223	274	141	uncharacterized LOC100540001
LOC104911498	85	121	130	152	177	141	DNA-binding protein SATB1
LOC104909677	148	94	149	112	137	141	BRCA1-A complex subunit BRE-like
LOC100546974	196	144	162	149	164	141	protein VAC14 homolog
LOC100540888	117	123	108	111	127	141	synaptotagmin-10
GATAD2B	174	123	149	150	163	141	GATA zinc finger domain containing 2A
LOC104912835	141	121	156	112	141	141	CDC42 small effector protein 2-B-like
AP5M1	177	116	183	128	183	140	adaptor-related protein complex 5, mu 1 subunit
CLDN1	201	253	182	209	186	140	chloride channel, voltage-sensitive 7
C3H18orf42	128	117	162	111	133	140	chromosome 3 open reading frame, human C18orf21
LOC104912876	83	114	85	127	77	140	uncharacterized LOC104912876
LOC104912391	189	125	166	130	137	140	rab GTPase-activating protein 1-like
LOC104913733	112	96	128	119	153	140	uncharacterized LOC104913733
AK4	177	150	190	137	138	140	adenylate kinase 4
LOC104911106	158	141	138	139	158	140	MAP kinase-activating death domain protein-like
CBX4	187	152	183	138	186	140	chromobox homolog 3
SEMA4D							sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4D
	135	133	135	114	136	140	uncharacterized LOC104912128
LOC104912128	174	118	146	131	156	140	sorting nexin 24
SNX24	139	114	146	124	97	140	uncharacterized LOC104915026
LOC104915026	136	114	152	117	114	140	zinc finger, AN1-type domain 5
ZFAND5	109	135	127	200	99	140	carbohydrate (keratan sulfate Gal-6) sulfotransferase 1
CHST10	176	138	157	143	154	140	DDHD domain containing 1
DDHD2	161	150	149	129	161	140	meiosis-specific nuclear structural 1
MNS1	185	115	127	127	123	140	multidrug resistance protein 3-like
LOC104909237	155	134	126	130	119	140	S-phase cyclin A-associated protein in the ER
SCAPER	129	116	146	143	131	140	aprataxin-like
LOC104915326	152	124	143	133	119	140	uncharacterized LOC104916018
LOC104916018	159	125	144	124	198	139	C-x(9)-C motif containing 4
CMIP	193	146	182	141	141	139	uncharacterized LOC104911158
LOC104911158	141	149	133	135	110	139	protein phosphatase 1, regulatory (inhibitor) subunit 1B
PPP1R1B	227	155	176	135	155	139	hes family bHLH transcription factor 6
HESX1	135	140	154	152	149	139	zinc finger CCCH-type containing 10
ZC3H10	164	127	139	107	134	139	protein MMS22-like
LOC100538829	335	152	331	291	565	139	carbohydrate (chondroitin 4) sulfotransferase 11
CHST12	191	148	182	139	158	139	rhophilin, Rho GTPase binding protein 1
RHPN1	198	102	167	111	181	139	selenoprotein T
LOC100548716	250	106	164	124	160	139	serine/threonine kinase 24
STK24	174	136	161	131	155	139	Y+L amino acid transporter 2-like
LOC100541411	149	121	164	160	138	139	abhydrolase domain containing 1
ABHD1	151	134	135	112	133	139	uncharacterized LOC104910777
LOC104910777	118	114	114	144	165	139	histone-lysine N-methyltransferase SUV39H1-like
LOC104916314	167	119	131	115	112	139	murine retrovirus integration site 1 homolog
MRV1	128	175	125	158	147	139	retinal pigment epithelium-specific protein 65kDa
RPE65	169	111	189	118	122	138	EPH receptor A4
EPHA5	126	120	144	115	135	138	golgi to ER traffic protein 4 homolog (S. cerevisiae)
GFAP	144	123	131	147	108	138	solute carrier family 25, member 34
SLC25A34	83	175	101	165	100	138	extracellular tyrosine-protein kinase PKDCC-like
LOC100546870	89	121	115	91	96	138	phosphatidylinositol 4-phosphate 3-kinase C2 domain-containing subunit
LOC104911029							alpha-like
	145	119	141	145	135	138	replication protein A3, 14kDa
RPA3	172	85	131	91	120	138	
MAF							v-maf avian musculoaponeurotic fibrosarcoma oncogene homolog
	116	143	131	148	148	138	bone morphogenetic protein receptor, type IB
BMPR1B	115	53	110	80	70	138	mitogen-activated protein kinase 12
MAPK12	163	130	160	121	133	138	syndecan 1
SDC1	144	142	159	120	127	138	taste receptor type 1 member 1
LOC104914114	137	126	111	110	96	138	arf-GAP with dual PH domain-containing protein 1-like
LOC104909254	245	180	191	158	215	138	translational activator GCN1-like
LOC104913597	169	136	176	159	128	138	tetratricopeptide repeat domain 25
TTC25	177	128	155	125	125	137	
MITD1							MIT, microtubule interacting and transport, domain containing 1
	149	116	152	123	127	137	natural resistance-associated macrophage protein 2-like
LOC104916884	134	109	122	111	132	137	solute carrier family 44, member 5
SLC44A5	150	151	136	157	107	137	nuclear factor of kappa light polypeptide gene enhancer in B-cells
NFKBIZ							inhibitor, zeta
	207	146	187	202	174	137	uncharacterized LOC104909927
LOC104909927	89	125	124	134	114	137	phosphatidylinositol glycan anchor biosynthesis, class A
PIGA	132	123	166	150	148	137	FIG4 phosphoinositide 5-phosphatase
FIGF	112	117	150	197	108	137	
DDHD1							dopa decarboxylase (aromatic L-amino acid decarboxylase)
	236	146	194	135	180	137	
B3GNT2							UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 2
	159	143	153	145	166	137	

LOC104916726	141	160	148	126	146	137	chromosome unknown open reading frame, human C8orf82
ZMAT3	192	136	144	134	187	137	zinc finger, matrin-type 3
FBLIM1	143	117	136	110	139	137	Fas (TNFRSF6) binding factor 1
LOC104916889	106	166	109	162	137	137	hemojuvelin pseudogene
MFSD4	159	144	166	174	173	137	major facilitator superfamily domain containing 4
CLDN5	128	118	118	153	114	137	claudin 3
LOC104914589							arf-GAP with GTPase, ANK repeat and PH domain-containing protein 3-
	194	120	167	110	126	137	like
MDFI	144	128	146	92	87	137	MyoD family inhibitor
LOC104914743	172	109	163	112	145	137	dymeclin-like
LOC100551381	131	136	130	171	110	137	fibroblast growth factor 1-like
HSPB11	169	141	126	135	124	137	heat shock 27kDa protein 1
LOC104916836							pyruvate dehydrogenase (acetyl-transferring) kinase isozyme 2,
	116	251	129	266	148	137	mitochondrial-like
LOC100540378	105	119	166	119	101	137	serine-protein kinase ATM
SESN2	72	133	137	145	95	137	sestrin 2
ERCC8	142	118	146	120	93	137	excision repair cross-complementation group 6-like
PCDH19	182	121	144	125	138	137	protocadherin 19
LOC100543381	119	104	103	120	112	137	phosphatidylethanolamine N-methyltransferase-like
TTPA	99	210	125	186	50	137	tocopherol (alpha) transfer protein
KLHL38	28	119	49	139	16	137	kelch-like family member 36
FAS	206	164	189	188	155	137	phenylalanyl-tRNA synthetase, beta subunit
DCAF12	119	116	140	124	143	137	DDB1 and CUL4 associated factor 10
BOK	137	124	148	125	172	136	BCL2-related ovarian killer
LOC100550341	161	123	149	140	156	136	corepressor interacting with RBPJ 1
LOC104916093	119	115	115	107	114	136	uncharacterized LOC104916093
GPR144	304	89	238	102	139	136	G protein-coupled receptor 143
CDO1	151	171	182	123	153	136	cyclin-dependent kinase inhibitor 3
LOC104914639	147	85	154	98	113	136	lamin-B2 pseudogene
LOC104909560	164	165	172	180	139	136	neurexin-1-like
LOC104912256	135	143	149	132	118	136	retinal-specific ATP-binding cassette transporter-like
SLC26A11	118	131	146	133	142	136	solute carrier family 26 (anion exchanger), member 11
LOC104911452	137	134	143	126	132	136	dnaj homolog subfamily C member 1-like
B3GALT1	135	121	136	121	106	136	beta 1,3-galactosyltransferase-like
TMEM82	91	188	106	169	113	136	transmembrane protein 82
PEX7	142	109	157	124	140	136	peroxisomal biogenesis factor 7
DDAH1	183	142	131	150	102	136	DET1 and DDB1 associated 1
SLC45A3	193	169	143	151	153	136	solute carrier family 45, member 3
ANKRD40	154	134	137	135	120	136	ankyrin repeat domain 40
AXIN2	156	163	154	151	135	136	axin 2
GAB3	165	133	152	134	147	136	GRB2-associated binding protein 2
PPP1R9A	125	110	132	118	111	136	protein phosphatase 1, regulatory subunit 9A
VKORC1L1	169	146	155	141	164	136	vitamin K epoxide reductase complex, subunit 1-like 1
ADAMTS14							
	139	149	145	105	134	136	ADAM metalloproteinase with thrombospondin type 1 motif, 14
LOC100539021	145	94	116	108	146	136	olfactory receptor 14J1-like
LOC104909432	123	100	115	83	86	136	uncharacterized LOC104909432
GPFR1	163	139	181	112	148	136	glycerol-3-phosphate dehydrogenase 1-like
LHFPL2	146	111	120	109	124	136	lipoma HMGIC fusion partner
PMEPA1	195	126	167	127	177	135	prostate transmembrane protein, androgen induced 1
DHRS12	93	165	89	181	89	135	dehydrogenase/reductase (SDR family) member 11
LOC100544165	103	98	110	100	109	135	olfactory receptor 14C36-like
LOC100540261	135	141	140	163	137	135	olfactory receptor 14J1-like
LOC104913925	132	132	146	169	136	135	protein phosphatase 1D-like
NEK11	109	96	98	116	115	135	NIMA-related kinase 11
XRCC1							
	155	139	161	105	143	135	X-ray repair complementing defective repair in Chinese hamster cells 1
B3GALT4							
	143	132	132	109	109	135	UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 4
IL18R1	209	161	176	124	180	135	interleukin 18 binding protein
LOC104909219	120	116	131	108	120	135	two pore calcium channel protein 1-like
TMEM41B	146	102	118	132	132	135	transmembrane protein 41B
LOC104916019	162	145	140	147	130	135	protein SCO2 homolog, mitochondrial
LOC100548070	141	122	116	101	108	135	dnaj homolog subfamily A member 1-like
CBLN1	150	87	202	154	159	135	Cbl proto-oncogene-like 1, E3 ubiquitin protein ligase
TVP23A							
	135	120	131	90	100	135	trans-golgi network vesicle protein 23 homolog A (S. cerevisiae)
C5H1SorF52	92	169	133	177	185	135	chromosome 5 open reading frame, human C14orf79
LOC100540410							mucosa-associated lymphoid tissue lymphoma translocation protein 1-
	89	145	151	145	106	135	like
PRKCB	147	107	136	132	115	135	protein kinase C, beta
KIAA0408	102	117	107	158	107	135	KIAA0391 ortholog
MYO1F	139	101	132	139	154	134	myosin IF
LOC104917369	144	127	141	182	177	134	junctional-1-like
CCDC28B	120	160	141	132	157	134	coiled-coil domain containing 28A
LOC104910204	137	102	139	133	128	134	inversin-like
PSD	153	145	156	121	132	134	pleckstrin and Sec7 domain containing
LOC100545337	135	131	159	86	77	134	keratin, type II cytoskeletal cochlear
LOC104916769	115	133	114	112	116	134	5'-AMP-activated protein kinase subunit gamma-1-like

LOC104912468	122	147	156	146	156	134	uncharacterized LOC104912468
LOC104917072	91	132	90	106	59	134	zinc finger protein 502-like
LOC100541513	158	120	157	124	112	134	serine/threonine-protein kinase Sgk1
LOC104910768	145	98	172	122	105	134	WD repeat-containing protein 36-like
ZNF469	131	131	155	114	130	134	zinc finger protein 469
MFAP5	119	165	135	190	192	134	microfibrillar associated protein 5
LOC100541035	129	126	145	131	157	133	keratin, type I cytoskeletal 19-like
LOC104912657	335	142	217	174	112	133	uncharacterized LOC104912657
RBPMS2	170	132	141	117	165	133	RNA binding protein with multiple splicing 2
LOC100549513	101	137	103	138	100	133	uncharacterized LOC100549511
LOC104913929	96	148	124	135	138	133	breast carcinoma-amplified sequence 3-like
LOC104916309	160	146	136	134	144	133	neuroligin-2
LOC104916346	154	124	122	124	139	133	AT-hook DNA-binding motif-containing protein 1-like
LOC100549735	180	124	168	137	151	133	microtubule-associated serine/threonine-protein kinase 2
LOC104911263	142	136	133	119	111	133	uncharacterized LOC104911263
USP12	208	158	152	131	151	133	ubiquitin specific peptidase 12
C28H6orf132	157	154	144	120	134	133	chromosome 28 open reading frame, human C6orf106
LOC104910675	95	85	99	54	85	133	uncharacterized LOC104910675
LOC100541781	144	138	136	125	120	133	protein FAM13B-like
TRIM65	131	159	139	135	131	133	tripartite motif containing 65
LOC104916602	121	112	114	131	119	133	DDB1- and CUL4-associated factor 12-like
SLC52A3	161	110	144	119	135	133	solute carrier family 52 (riboflavin transporter), member 3
LSM10	120	128	138	128	145	133	LSM10, U7 small nuclear RNA associated
TRIM2	106	102	107	135	118	133	tripartite motif containing 2
RDH16	107	115	99	89	112	133	retinol dehydrogenase 16 (all-trans)
SLC9A5							solute carrier family 9, subfamily A (NHE5, cation proton antiporter 5), member 5
	86	113	121	114	99	132	
ANKS1A	142	125	130	154	131	132	ankyrin repeat and sterile alpha motif domain containing 1A
LOC104912067	134	131	151	153	121	132	erythroid differentiation-related factor 1-like
CMTM4	157	140	153	146	122	132	CKLF-like MARVEL transmembrane domain containing 3
CLUAP1	125	127	134	116	116	132	clusterin
LOC100542638	149	158	156	169	170	132	probable G-protein coupled receptor 158
KDM8	176	143	137	141	136	132	lysine (K)-specific demethylase 7A
CERS1	154	118	122	118	148	132	ceramide kinase-like
LOC104912945	138	112	151	149	127	132	lon protease homolog 2, peroxisomal-like
GPLOW	145	133	138	103	113	132	glucose-6-phosphate isomerase
LOC100548019	129	120	137	101	110	132	zinc finger protein ubi-d4-like
FBXL12	142	134	134	129	128	132	fibrosin-like 1
GGCT	162	112	149	112	139	132	gamma-glutamylamine cyclotransferase
CNTF	118	142	142	122	135	132	cyclin N-terminal domain containing 1
LOC104915931	203	146	170	92	139	132	neural Wiskott-Aldrich syndrome protein-like
CACNG4	324	122	268	107	234	132	calcium channel, voltage-dependent, gamma subunit 3
LOC100549281	183	129	150	109	111	132	nuclear factor 1 A-type-like
LOC104914676	140	112	135	106	112	132	uncharacterized LOC104914676
MST1	154	161	153	127	110	132	macrophage stimulating 1 (hepatocyte growth factor-like)
WDR25	129	110	140	121	127	132	WD repeat domain 25
LOC104914319	173	175	144	131	142	132	uncharacterized protein KIAA1522-like
LOC104914574	127	96	109	113	104	132	periodic tryptophan protein 2 homolog
C10H14orf80	144	121	158	100	94	132	basic leucine zipper and W2 domains 2
LOC104909730	113	129	136	141	132	132	mitogen-activated protein kinase kinase 5-like
LOC104915621	163	115	141	156	154	131	tetratricopeptide repeat protein 38-like
LBX1	174	120	123	140	155	131	lamin B receptor
DEPDC1	136	106	170	121	112	131	density-regulated protein
LOC100538811	112	118	120	129	141	131	Fc receptor-like protein 4
SPSB1							
	102	110	113	177	94	131	splA/ryanodine receptor domain and SOCS box containing 1
SUOX	118	110	115	107	138	131	sulfite oxidase
PLCG2	159	137	137	133	151	131	phospholipase C, gamma 2 (phosphatidylinositol-specific)
PRIMA1	196	114	303	96	135	131	proline rich membrane anchor 1
LOC104916774							
	144	87	138	100	116	131	potassium voltage-gated channel subfamily C member 1 pseudogene
CDR2L	146	104	109	113	113	131	cerebellar degeneration-related protein 2, 62kDa
LRRN4	170	128	155	127	135	131	leucine rich repeat neuronal 4
SLC26A8	137	126	154	116	130	131	solute carrier family 26 (anion exchanger), member 8
SCARA3	131	180	139	135	130	131	scavenger receptor class A, member 3
TAPBP	310	160	229	157	255	131	TAP binding protein (tapasin)
LOC100542902	126	155	119	144	178	131	low-density lipoprotein receptor-related protein 1B-like
NEURL2	112	121	108	128	125	131	neuronal E3 ubiquitin protein ligase 2
GLTP	128	115	132	119	123	131	glycosyltransferase 8 domain containing 2
TCFL5	180	113	149	109	119	131	transcription factor-like 5 (basic helix-loop-helix)
USP31	168	149	172	154	167	131	ubiquitin specific peptidase 31
LOC104914470	154	128	136	113	109	131	lymphoid-restricted membrane protein-like
CDKN2C	143	120	135	117	138	131	CDKN2A interacting protein
MOCOS	102	101	112	110	146	131	molybdenum cofactor sulfurase
CREBRF	82	89	88	156	66	131	cAMP responsive element binding protein-like 2
CAB39L	111	110	102	93	99	131	caspace activity and apoptosis inhibitor 1
LOC104911466	94	125	121	97	350	130	1-aminocyclopropane-1-carboxylate synthase-like protein 1
DOK7	108	116	131	135	100	130	docking protein 5
LOC104913234	123	107	134	109	128	130	uncharacterized LOC104913234

LOC104916066	133	119	137	119	93	130	uncharacterized LOC104916066
PPARG	182	141	169	122	133	130	peroxisome proliferator-activated receptor gamma
ARL4C	192	106	162	119	125	130	ADP-ribosylation factor-like 4C
LOC104916034	163	143	158	132	134	130	F-box only protein 46-like
PRMT8	132	131	136	119	120	130	protein arginine methyltransferase 8
GPATCH3	129	113	131	117	112	130	G patch domain containing 2-like
LOC100544170	115	180	111	132	95	130	thioredoxin-like protein 1
LOC104915299	113	135	147	120	105	130	sushi domain-containing protein 1
LOC104917118	323	142	206	199	166	130	proline-rich protein 4-like
LOC100545373	144	119	146	124	112	130	toll-like receptor 2 type-1
ARHGAP44	90	108	101	114	110	130	Rho GTPase activating protein 44
LOC100544965	147	275	164	181	184	130	pinopsin-like
LOC104916163	125	99	131	91	125	130	N-acetylserotonin O-methyltransferase-like protein
CEP97	189	102	130	101	136	129	centrosomal protein 95kDa
LOC104911233	135	114	124	128	125	129	endoribonuclease Dicer-like
LOC104917598	92	107	120	140	94	129	poly [ADP-ribose] polymerase 4-like
CHRNA5	194	120	154	130	131	129	cholinergic receptor, nicotinic, alpha 4 (neuronal)
LOC104910753	135	128	145	117	121	129	LON peptidase N-terminal domain and RING finger protein 1-like
LOC100538555	95	110	109	101	91	129	protein FAM49A-like
NAPEPLD	131	130	137	118	137	129	N-acyl phosphatidylethanolamine phospholipase D
LOC104916782	89	157	130	107	116	129	titin-like
LOC100548173	146	168	118	117	133	129	zinc finger protein 586-like
SAMD12	189	175	171	164	163	129	sterile alpha motif domain containing 12
MFS07	162	139	148	118	114	129	major facilitator superfamily domain containing 7
LOC104910665	44	85	86	40	58	129	uncharacterized LOC104910665
LOC104912422	74	112	94	112	108	129	inaD-like protein
LOC104917180	124	80	111	100	109	129	uncharacterized LOC104917180
LOC104911002	147	149	190	111	134	129	dickkopf-related protein 3
PTCHD1	159	144	154	118	183	129	patched domain containing 1
LOC104914570	114	124	104	124	110	129	uncharacterized LOC104914570
LOC104913284	142	123	152	153	137	128	protein FAM13B-like
ITGB2	150	88	142	123	168	128	integrin beta 1 binding protein (melusin) 2
VPS9D1	142	128	139	128	141	128	VPS9 domain containing 1
LOC104917314	139	102	123	96	122	128	14-3-3 protein gamma-B
CEP41	146	101	117	98	114	128	centrosomal protein 350kDa
STAT2	145	135	120	137	116	128	signal transducer and activator of transcription 2, 113kDa
SERPIN1	132	137	135	111	97	128	serpin peptidase inhibitor, clade I (neuroserpin), member 1
MBLAC1	115	133	132	119	105	128	metallo-beta-lactamase domain containing 1
LOC104915770	158	104	141	141	129	128	DNA-directed RNA polymerase II subunit RPB1-like
POLA1	171	143	186	126	116	128	polymerase (DNA directed), alpha 1, catalytic subunit
PLS1	74	69	61	87	48	128	plastin 1
LOC104913340	46	141	117	111	103	128	cyclin-F-like
LOC104910974	146	118	150	97	124	128	uncharacterized LOC104910974
ANO3	141	115	141	140	149	128	anoctamin 3
LOC104916823	149	116	114	129	113	128	maestro heat-like repeat-containing protein family member 1
SLCO2A1	232	166	189	137	189	128	solute carrier organic anion transporter family, member 2A1
KLHL6	147	141	124	144	144	127	kelch-like family member 5
LOC104914701	168	118	170	145	206	127	metallophosphoesterase domain-containing protein 1-like
GLA	97	144	157	131	136	127	gastrokine 2
LOC104910264	139	76	161	105	133	127	piezo-type mechanosensitive ion channel component 2-like
LOC104910771	125	101	117	90	118	127	atrial natriuretic peptide-converting enzyme-like
ARHGAP18	157	92	136	112	129	127	Rho GTPase activating protein 18
CEP164	148	117	143	139	121	127	centrosomal protein 162kDa
NSUN7	102	111	104	111	123	127	NOP2/Sun domain family, member 7
PIK3R5	161	99	176	146	165	127	phosphoinositide-3-kinase, regulatory subunit 5
LOC104910574	127	106	124	118	128	127	E3 ISG15--protein ligase HERC5-like
FBXO4	184	128	173	124	110	127	F-box protein 39
LOC104916867	146	98	118	108	102	127	flocculation protein FLO11-like
PAQR8	167	145	147	124	131	127	progesterin and adipoQ receptor family member VIII
IL13RA1	132	108	142	119	141	127	interleukin 12B
LOC100544119	147	95	167	99	105	127	keratin, type II cytoskeletal 4-like
LOC104910282	205	145	183	159	171	127	tyrosine-protein kinase Yes-like
CALHM2	183	138	154	113	143	127	calcium homeostasis modulator 1
LOC100540418	159	94	93	61	249	127	LIM homeobox transcription factor 1-alpha-like
LOC104909204	127	112	159	116	131	127	UPF0687 protein C20orf27-like
LOC104914093	133	129	132	118	123	127	uncharacterized LOC104914093
SLC16A7	112	144	136	130	103	127	solute carrier family 16 (monocarboxylate transporter), member 7
GTSF1	131	145	133	137	134	127	G-2 and S-phase expressed 1
SHC4	181	137	144	106	96	127	SHC (Src homology 2 domain containing) family, member 4
FAM198A	128	111	144	81	74	126	family with sequence similarity 195, member A
FOXN3	108	139	121	149	138	126	forkhead box N2
LOC100551403	156	121	145	120	129	126	DNA polymerase delta subunit 3-like
LOC104912650	70	128	89	136	104	126	serine/threonine-protein phosphatase 2A regulatory subunit B" subunit
EXD1	67	121	84	105	85	126	delta-like
BDKRB2	168	167	187	147	124	126	EWS RNA-binding protein 1
							bradykinin receptor B2

CUBN	103	157	127	95	63	126	cortixin 3
PLEKHH3	186	136	155	109	164	126	pleckstrin homology domain containing, family H (with MyTH4 domain) member 3
P4HTM	116	142	101	119	119	126	prolyl 4-hydroxylase, transmembrane (endoplasmic reticulum)
GP1BB	117	107	124	135	122	126	glutamic-oxaloacetic transaminase 2, mitochondrial
TMEM234	85	125	101	103	108	126	transmembrane protein 234
LOC104912491	159	123	154	152	131	126	dedicator of cytokinesis protein 7-like
LPCAT1	153	143	158	134	123	126	lysophosphatidylcholine acyltransferase 1
ACKR4	133	154	140	142	233	126	atypical chemokine receptor 4
LOC100548900	50	59	154	232	397	126	myosin regulatory light chain 2, smooth muscle minor isoform
AMIGO1	96	114	116	100	119	126	adhesion molecule with Ig-like domain 1
BRF2	148	135	122	122	142	126	BRF1, RNA polymerase III transcription initiation factor 90 kDa subunit
C10H1orf111	131	86	136	88	114	126	chromosome 10 open reading frame, human C14orf80
LOC104916880	142	156	117	217	160	126	neuroblast differentiation-associated protein AHNAK-like
DGUOK	123	152	136	108	116	126	diacylglycerol kinase, zeta
ZNF414	129	100	126	121	113	126	zinc finger protein 414
ARG2	133	109	126	118	131	125	arginase 2
AGO3	195	121	172	130	153	125	argonaute RISC catalytic component 3
IFT57	136	121	150	141	135	125	intraflagellar transport 52
LOC100544344	159	131	140	113	94	125	heme-binding protein 2-like
RBMS3	127	123	147	135	139	125	RNA binding motif, single stranded interacting protein 3
LOC104913521	161	107	151	115	156	125	uncharacterized LOC104913521
HYL51	174	114	165	116	129	125	hydroxyllysine kinase
SERTAD2	184	151	158	162	141	125	SERTA domain containing 2
SLC35G1	111	92	92	116	192	125	solute carrier family 35, member G1
LOC100542630	130	96	143	108	113	125	collagen alpha-1(XI) chain-like
TEX30	82	123	99	148	75	125	testis expressed 30
C2H1orf131	179	111	165	116	124	125	chromosome 2 open reading frame, human C1orf115
LOC104910621	133	158	134	139	135	125	polycystin-2-like
LOC104911971	153	104	160	106	118	125	kinesin-like protein KIF20B
LOC104909763	128	186	124	142	86	125	uncharacterized LOC104909763
DACH2	127	126	141	125	113	125	dachshund family transcription factor 1
LOC104910054	144	104	143	129	133	125	CD2-associated protein-like
LOC104915181	137	117	157	114	114	125	inositol hexakisphosphate and diphosphoinositol-pentakisphosphate kinase 2
UCHL1	111	101	128	125	154	125	ubiquitin carboxyl-terminal esterase L1 (ubiquitin thiolesterase)
C19H16orf93	146	136	137	109	116	125	chromosome 17 open reading frame, human C12orf65
LOC104909268	115	122	133	126	104	124	leucine-rich repeat-containing protein 41-like
CZH5orf34	134	102	122	84	85	124	chromosome 2 open reading frame, human C5orf30
PROM1	190	124	149	132	104	124	prominin 1
SSTR4	155	198	122	122	99	124	somatostatin receptor 4
LOC104916016	177	128	146	100	165	124	geranylgeranyl transferase type-2 subunit alpha-like
LOC100542589	240	125	173	216	369	124	HEAT repeat-containing protein 5B
LOC104915545	188	126	180	124	146	124	heterogeneous nuclear ribonucleoprotein U-like protein 1
LOC104911305	159	144	140	125	124	124	zinc finger protein 577-like
LOC100548047	107	151	106	153	118	124	vascular endothelial growth factor receptor kdr-like
BBS10	134	141	132	133	103	124	Bardet-Biedl syndrome 10
RWDD2B	90	106	85	89	80	124	RWD domain containing 2B
LOC104913124	168	164	159	164	184	124	acylamino-acid-releasing enzyme-like
VAV3	117	117	99	107	133	124	vav 3 guanine nucleotide exchange factor
RWDD2A	130	131	120	134	142	124	RWD domain containing 2A
KIT	125	91	113	121	141	124	kin of IRRE like 3 (Drosophila)
LOC104916317	128	104	97	84	103	124	uncharacterized LOC104916317
MSANTD3	169	120	142	109	107	124	Myb/SANT-like DNA-binding domain containing 3
CPS1	131	204	148	133	135	124	carboxypeptidase Q
LOC104916107	126	85	122	75	104	123	uncharacterized LOC104916107
ADAMTS5	170	138	142	140	136	123	ADAM metalloproteinase with thrombospondin type 1 motif, 5
OPCML	93	79	118	114	132	123	opioid binding protein/cell adhesion molecule-like
LOC104914628	29	313	64	319	337	123	uncharacterized LOC104914628
LOC104911021	176	107	148	117	149	123	protein SAAL1-like
LOC100541803	175	134	159	166	186	123	uncharacterized LOC100541794
LOC104909881	128	101	131	109	109	123	cyclin-C-like
FIGN	126	128	138	162	129	123	c-fos induced growth factor (vascular endothelial growth factor D)
LOC104912994	197	121	165	126	126	123	nuclear pore complex protein Nup93-like
SLC25A22	164	110	137	113	106	123	solute carrier family 25 (mitochondrial carrier: glutamate), member 22
LOC104909898	71	65	68	119	154	123	uncharacterized LOC104909898
LOC100543395	110	106	116	108	116	123	WD40 repeat-containing protein SMU1
LOC104917440	118	88	109	99	103	123	UDP-glucose:glycoprotein glucosyltransferase 2-like
TMEM63C	136	135	121	141	135	123	transmembrane protein 63C
LOC100545886	121	131	113	99	92	123	homeobox protein SIX6
HOXA9	108	104	101	102	150	123	homeobox A3

GPR37L1							
	99	146	84	80	69	123	G protein-coupled receptor 37 (endothelin receptor type B-like)
FDXACB1	170	122	152	109	137	123	ferredoxin 1
LOC104913994	149	84	129	131	121	123	uncharacterized LOC104913994
LOC104916337	163	98	152	94	122	123	uncharacterized LOC104916337
HIVEP3							
	129	147	126	112	114	123	human immunodeficiency virus type I enhancer binding protein 2
LOC104912555	108	112	120	139	122	123	E3 ubiquitin-protein ligase TRIP12-like
LOC104909613	214	119	177	102	114	122	uncharacterized LOC104909613
USP18	142	106	128	97	104	122	ubiquitin specific peptidase 18
KCNJ15							
	147	109	119	95	93	122	potassium inwardly-rectifying channel, subfamily J, member 13
LOC104910213	135	120	119	83	97	122	polypeptide N-acetylgalactosaminyltransferase 12-like
ASIC4	147	109	86	110	91	122	acid-sensing (proton-gated) ion channel family member 4
LOC104915208	142	126	138	98	108	122	DNA polymerase alpha catalytic subunit-like
LOC100540595	137	149	138	143	151	122	CAS1 domain-containing protein 1
LOC104914514	130	106	133	117	109	122	plexin-A2-like
KIF21B	179	153	145	136	122	122	kinesin family member 21A
LOC100547963	111	133	123	153	172	122	riboflavin-binding protein
GHDC	135	128	115	113	127	122	gamma-glutamyltransferase 7
ANGPTL4	80	194	134	270	105	122	angiotensin-like 4
LOC104915707	135	109	116	109	111	122	uncharacterized LOC104915707
LOC104912157	135	96	120	95	105	122	uncharacterized LOC104912157
LOC104915156	109	111	123	151	83	122	probable ATP-dependent RNA helicase YTHDC2
NDST3							
	155	92	132	111	92	122	N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 3
CYSLTR1	123	121	131	108	164	122	cysteine-rich, angiogenic inducer, 61
LOC100538868	129	85	112	108	141	122	putative protocadherin beta-18
MIDN	150	124	157	101	139	121	midnolin
NCKAP1L	130	75	100	119	133	121	NCK-associated protein 1-like
PROCR	132	124	155	120	172	121	protein C receptor, endothelial
LOC104912350	138	117	170	157	146	121	angiotensin-related protein 1 pseudogene
NFAM1	127	88	140	108	141	121	NFAT activating protein with ITAM motif 1
LOC100540450	173	168	150	205	168	121	C-X-C chemokine receptor type 1-like
LRP6	175	143	167	189	136	121	low density lipoprotein receptor-related protein 6
GIPC1	158	130	153	129	119	121	gastric inhibitory polypeptide
ADAMTSL1	135	157	166	140	148	121	ADAMTS-like 1
LOC104910738	110	161	136	223	143	121	protein FAM149A
MDK	139	116	122	136	145	120	midkine (neurite growth-promoting factor 2)
LOC104917341	150	124	139	137	129	120	glutamate dehydrogenase 1, mitochondrial pseudogene
CDC26	153	126	126	100	113	120	cell division cycle 25B
LOC104910469	151	81	138	92	104	120	uncharacterized LOC104910469
TRIM35	216	141	176	116	170	120	tripartite motif containing 35
LOC100548964	95	110	102	135	116	120	wiskott-Aldrich syndrome protein family member 3-like
LOC104913412	176	113	154	123	117	120	retinoic acid-induced protein 1-like
LOC104917533	206	101	144	129	211	120	uncharacterized LOC104917533
LOC104913600	143	119	121	104	124	120	EMI domain-containing protein 1-like
LOC104916294	135	117	156	113	150	120	transcriptional activator protein Pur-alpha
LOC104912389	114	104	132	115	134	120	uncharacterized LOC104912389
RNF44	182	152	140	155	134	120	ring finger protein 44
HOOK1	127	117	144	126	108	120	homer homolog 3 (Drosophila)
ACRV1	137	161	117	120	129	120	acrosomal vesicle protein 1
GREB1L	110	122	122	123	134	120	growth factor receptor-bound protein 7
LOC104917388	158	110	126	151	108	120	uncharacterized LOC104917388
LOC104913453	115	113	106	107	114	120	uncharacterized LOC104913453
FEZ1	110	139	103	121	114	120	FEV (ETS oncogene family)
MAPK13	191	118	153	148	148	120	mitogen-activated protein kinase 13
SCD5	159	106	125	117	118	119	stearoyl-CoA desaturase 5
LOC104915946	114	140	117	174	137	119	ryanodine receptor 2-like
LOC100548822							
	115	101	101	96	75	119	disintegrin and metalloproteinase domain-containing protein 20-like
LOC104916390	173	132	162	126	153	119	signal-induced proliferation-associated 1-like protein 3
CENPO	169	102	132	110	96	119	centromere protein N
LOC104910677	119	84	110	78	132	119	PEAK1 related kinase activating pseudokinase 1
TRAF6							
	161	137	149	145	127	119	TNF receptor-associated factor 6, E3 ubiquitin protein ligase
LOC104910620	148	67	116	87	203	119	uncharacterized LOC104910620
ASB13	130	119	125	131	147	119	ankyrin repeat and SOCS box containing 13
LOC100548015	158	106	142	135	138	119	monocyte differentiation antigen CD14-like
BHLHA15	190	143	176	118	134	119	basic helix-loop-helix family, member a15
KCNA5							
	154	106	137	93	133	119	potassium voltage-gated channel, shaker-related subfamily, member 4
UBE2Z	168	124	138	126	132	119	ubiquitin-conjugating enzyme E2Z
LOC100543114	123	112	141	99	120	119	schwannomin-interacting protein 1
WDR73	144	97	122	105	110	119	WD repeat domain 73
SLIT2	130	182	121	118	119	119	slit homolog 2 (Drosophila)
MOK	97	114	93	120	103	119	MOK protein kinase
LOC104913759	116	126	140	111	92	119	ephrin type-A receptor 3-like
EMILIN3	149	96	164	99	127	119	elastin microfibril interfacer 2

LOC104913108	162	148	125	139	103	119	dedicator of cytokinesis protein 3-like
LOC104916957	154	98	138	128	124	119	phosphatidylinositol 3,4,5-trisphosphate 5-phosphatase 2-like
LOC104910668	99	105	128	122	99	119	protein transport protein Sec24B-like
PLXNB1	79	116	82	160	108	119	plexin B1
INTS5	131	122	114	133	117	119	integrator complex subunit 4
AGBL1	88	112	81	87	67	119	ATP/GTP binding protein-like 1
LOC104909270	154	121	153	103	102	118	neurolysin, mitochondrial-like
PBX4	124	125	124	120	129	118	pre-B-cell leukemia homeobox 4
LOC104910276	144	106	145	131	156	118	methyltransferase-like protein 4
MFAP3L	148	124	124	105	125	118	microfibrillar-associated protein 3-like
LOC104917613	144	133	171	170	98	118	platelet-derived growth factor D-like
LOC104914163	159	115	134	97	122	118	uncharacterized LOC104914163
ACSS3	186	137	134	130	129	118	acyl-CoA synthetase short-chain family member 3
LOC100538484	90	82	109	128	97	118	short chain dehydrogenase/reductase family 16C member 5
LOC104909209	78	110	89	104	80	118	anosmin-1-like
LOC104915358	72	81	109	76	67	118	uncharacterized LOC104915358
TUB	135	120	153	146	126	118	tubby bipartite transcription factor
LOC104913620	190	123	150	120	142	118	antigen peptide transporter 2-like
GATSL3	122	139	122	114	145	118	GATS protein-like 2
LOC100542888	104	131	143	121	111	118	tyrosine-protein kinase ZAP-70
TRIM62	130	145	129	140	124	118	tripartite motif containing 62
LOC100542248	94	76	85	73	78	118	dynein light chain LC6, flagellar outer arm-like
LOC104915180	113	89	147	97	88	118	inositol hexakisphosphate and diphosphoinositol-pentakisphosphate kinase 2
LOC104917548	117	107	127	127	96	118	uncharacterized LOC104917548
LOC104914455	110	102	114	98	96	118	uncharacterized LOC104914455
APEX1	154	74	124	112	124	118	APEX nuclease (multifunctional DNA repair enzyme) 1
PIF1	157	107	171	105	140	118	PIF1 5'-to-3' DNA helicase
NKIRAS1	52	80	59	95	60	117	NFKB inhibitor interacting Ras-like 1
FAM168B	126	96	119	102	117	117	family with sequence similarity 168, member A
VIPR2	93	165	110	176	84	117	vasoactive intestinal peptide receptor 2
FGL1	81	149	102	206	133	117	FGGY carbohydrate kinase domain containing
HOXA3	109	132	125	106	112	117	homeobox A2
ODF2L	101	109	137	110	101	117	outer dense fiber of sperm tails 2-like
DHX58	157	135	135	103	90	117	DEAH (Asp-Glu-Ala-Asp/His) box polypeptide 57
COL6A6	144	207	138	183	165	117	collagen, type VI, alpha 3
LOC100540841	127	107	128	139	171	117	NEDD4-like E3 ubiquitin-protein ligase WWP1
LOC100542547	71	67	58	138	57	117	coiled-coil domain-containing protein 173-like
KLHL4	164	88	163	97	132	117	kelch-like family member 38
RAB28	153	114	132	136	115	117	RAB28, member RAS oncogene family
RAB40C	125	114	110	108	99	117	RAB40C, member RAS oncogene family
A4GALT	90	127	100	99	110	117	alpha 1,4-galactosyltransferase
STK16	154	116	135	107	126	117	serine/threonine kinase 16
LOC100546753	112	105	112	130	129	117	uncharacterized LOC100546750
LOC104911168	132	118	120	102	110	117	uncharacterized LOC104911168
RNF24	139	124	136	125	134	116	ring finger protein 24
AANAT	178	91	153	99	113	116	aralkylamine N-acetyltransferase
LOC104909840	96	108	117	148	119	116	laminin subunit alpha-4-like
GPR137C	144	115	139	121	147	116	G protein-coupled receptor 137B
LOC100542217	113	128	114	118	136	116	reticulon 4
TGIF1	119	127	120	127	96	116	TGFB-induced factor homeobox 1
OGG1	160	165	153	122	127	116	8-oxoguanine DNA glycosylase
RPUSD1	123	108	116	105	98	116	RNA pseudouridylate synthase domain containing 1
LOC100541993	124	137	100	118	116	116	probable phospholipid-transporting ATPase IIA
B3GALNT1	155	133	145	141	142	116	beta-1,3-N-acetylgalactosaminyltransferase 1 (globoside blood group)
CHRD1	143	187	101	153	194	116	chordin
LOC104912247	118	105	106	103	86	116	uncharacterized LOC104912247
KIF3C	121	119	159	120	161	116	kinesin family member 3B
NRROS	95	110	96	101	110	115	negative regulator of reactive oxygen species
CX3CL1	119	140	141	168	164	115	CWF19-like 2, cell cycle control (S. pombe)
ARHGAP23	148	115	119	111	128	115	Rho GTPase activating protein 23
LOC100547702	85	111	104	111	120	115	secreted frizzled-related protein 5-like
SLC6A7	120	128	84	77	71	115	solute carrier family 6 (neurotransmitter transporter), member 7
LOC104910021	209	110	159	122	151	115	uncharacterized LOC104910021
SHISA5	154	87	137	111	138	115	shisa family member 5
LOC104910942	172	100	135	91	153	115	membrane-spanning 4-domains subfamily A member 12-like
GTPBP3	105	143	114	108	136	115	GTP binding protein 2
TAL2	223	145	237	85	155	115	T-cell acute lymphocytic leukemia 2
UGGT2	117	91	125	101	92	115	UDP-glucose glycoprotein glucosyltransferase 2
LOC100547485	119	104	110	124	103	115	myotubularin
NABP2	142	93	124	122	127	115	nucleic acid binding protein 2
LOC104917584	130	128	138	117	127	115	neurobeachin-like
LOC104913735	133	96	118	125	128	115	uncharacterized LOC104913735
SAMD4B	139	111	127	106	139	115	sterile alpha motif domain containing 4B
NLRX1	125	133	120	132	129	115	NLR family member X1
MMEL1	94	171	133	170	143	115	membrane metallo-endopeptidase-like 1

LOC100549855	100	99	130	108	80	114	superkiller viralicidic activity 2-like 2
LOC104912183	104	149	151	168	115	114	rho GTPase-activating protein 6-like
LOC104912309	50	69	79	108	92	114	uncharacterized LOC104912309
JMY	111	98	114	129	88	114	jumonji domain containing 8
LCT							lymphocyte cytosolic protein 2 (SH2 domain containing leukocyte protein of 76kDa)
	129	103	128	84	108	114	
LOC104911277	83	114	60	104	78	114	actin-related protein 10-like
PTPN3	128	112	137	127	117	114	protein tyrosine phosphatase, non-receptor type 3
LOC104916367	139	108	114	95	118	114	anion exchange protein 2-like
IMMP2L							
	74	101	87	107	100	114	IMP1 inner mitochondrial membrane peptidase-like (S. cerevisiae)
IL10RB	127	101	136	115	110	114	interleukin 10 receptor, alpha
PLCXD2							
	118	107	151	127	171	114	phosphatidylinositol-specific phospholipase C, X domain containing 2
LOC100549707	154	138	174	151	154	114	semaphorin-3A-like
LOC100539929	87	104	88	87	92	114	uncharacterized LOC100539922
LOC100544450	181	77	132	106	144	114	cytochrome P450 2C9-like
LOC100545658	128	110	136	132	110	114	fibrinogen-like protein 1
LRRC71	119	115	120	85	111	114	leucine rich repeat containing 71
LOC104915897	118	91	93	113	107	114	LIX1-like protein
LOC100541596	119	101	125	114	126	114	X-linked retinitis pigmentosa GTPase regulator-like
PTAFR	140	97	143	142	150	114	platelet-activating factor receptor
MISP	142	98	95	131	139	114	mitotic spindle positioning
LOC100547835	201	144	152	95	126	114	methyltransferase-like protein 4
COL9A3	129	255	126	93	108	114	collagen, type IX, alpha 2
PDE1C	215	123	114	136	116	113	phosphodiesterase 1C, calmodulin-dependent 70kDa
GAN	120	89	113	95	99	113	guanidinoacetate N-methyltransferase
POLR3G							
	77	134	93	131	68	113	polymerase (RNA) III (DNA directed) polypeptide G (32kD)
LOC104914713	96	128	102	63	82	113	splicing factor, proline- and glutamine-rich-like
LOC104913085	170	160	130	148	138	113	piezo-type mechanosensitive ion channel component 1-like
LOC100544007	125	108	116	149	98	113	transmembrane protein 56-B-like
LOC104917048	113	97	111	99	132	113	Rho GTPase activating protein 27
LOC104913525	120	114	132	87	94	113	uncharacterized LOC104913525
PLXNC1	192	94	180	147	161	113	plexin C1
BMP7	176	113	191	79	117	113	bone morphogenetic protein 7
MID1	134	60	128	88	115	113	midline 1
LOC104911505	175	444	166	358	211	113	uncharacterized LOC104911505
ATCAY	171	142	139	124	168	113	ataxia, cerebellar, Cayman type
MYLK3	94	111	99	101	88	113	myosin light chain kinase 3
LOC100540278	143	168	104	141	156	113	ovocleidin-116-like
LOC104912586	137	102	141	119	120	113	calcium-binding protein 39-like
KIAA0895L	102	84	106	87	93	113	KIAA0895 ortholog
SRC	172	118	141	104	107	113	SRC proto-oncogene, non-receptor tyrosine kinase
LOC104913063	102	95	120	69	71	113	Fanconi anemia group A protein-like
THAP11	140	96	122	121	124	113	THAP domain containing 11
LOC104909382	95	104	103	93	73	113	protocadherin Fat 3-like
SHQ1	122	125	140	109	132	113	SHQ1, H/ACA ribonucleoprotein assembly factor
SHROOM2	149	124	117	114	112	113	shroom family member 2
LOC104914800							TATA box-binding protein-associated factor, RNA polymerase I, subunit C-
	135	100	127	98	105	113	like
LOC100540607	124	105	125	110	102	112	dual specificity protein phosphatase 13 isoform B-like
LOC104913803	145	101	140	86	98	112	centrosomal protein of 112 kDa-like
RBM15	141	101	119	118	103	112	RNA binding motif protein 15
LOC100550818	162	132	146	138	189	112	potassium channel subfamily K member 9-like
LOC104914479	91	115	85	134	83	112	uncharacterized LOC104914479
LOC104913701	135	118	137	138	153	112	pleckstrin homology-like domain family B member 2
LOC104916914	149	87	104	119	119	112	zinc finger protein ubi-d4-like
LOC104909520	94	107	75	99	103	112	ninein-like protein
LOC104912369	75	84	109	96	52	112	collagen alpha-1(XI) chain-like
MPLKIP	130	112	133	99	99	112	M-phase specific PLK1 interacting protein
LOC104910277							structural maintenance of chromosomes flexible hinge domain-
	116	103	111	137	120	112	containing protein 1-like
LOC104909229	114	86	112	91	109	112	nuclear receptor subfamily 5 group A member 2-like
ASTE1	124	105	110	101	105	112	asteroid homolog 1 (Drosophila)
ARL16	107	95	107	86	94	112	ADP-ribosylation factor-like 16
PARM1	106	155	107	134	109	112	prostate androgen-regulated mucin-like protein 1
SMIM5	70	111	90	156	83	112	small integral membrane protein 5
LOC104909329	85	90	110	95	83	112	histone-lysine N-methyltransferase SMYD3-like
LOC104914920	129	98	133	108	111	112	kinesin-like protein KIF2A
ING2	123	106	128	81	90	112	inhibitor of growth family, member 1
COL4A4							
	73	126	57	113	66	111	collagen, type IV, alpha 3 (Goodpasture antigen) binding protein
TOR4A	154	127	161	117	146	111	torsin family 4, member A
RAC2							ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2)
	136	94	126	98	118	111	
STS	98	107	109	128	94	111	steroid sulfatase (microsomal), isozyme S
SHISA6	116	73	107	86	106	111	shisa family member 6
LOC104915678	83	69	79	73	95	111	uncharacterized LOC104915678

RIPK2	155	124	140	110	120	111	receptor-interacting serine-threonine kinase 2
LOC100539605	136	118	121	107	110	111	olfactory receptor 5A51-like
CEP57L1	112	88	116	104	76	111	centrosomal protein 57kDa
NRSN1	115	133	106	118	108	111	neurensin 1
LOC104913025	88	99	69	111	70	111	copine-2-like
LOC104911173	126	107	118	136	120	111	ryanodine receptor 3-like
LOC104917142	42	58	70	73	60	111	protein FAM71B-like
CYHR1	140	92	100	103	109	110	cytoglobin
LOC104915681	140	111	121	111	107	110	nuclear pore complex protein Nup88-like
TMTC4	95	100	108	117	106	110	transmembrane and tetratricopeptide repeat containing 4
LOC100546176	126	89	123	103	105	110	cytochrome c oxidase copper chaperone
LOC104917433	119	110	123	114	113	110	dnaj homolog subfamily C member 3-like
SRD5A1							steroid-5-alpha-reductase, alpha polypeptide 1 (3-oxo-5 alpha-steroid
	131	105	145	83	110	110	delta 4-dehydrogenase alpha 1)
LOC100545322	132	138	123	154	262	110	eyes absent homolog 1
RPS4X	117	125	111	106	97	110	ribosomal protein S4, X-linked
LOC100539139	110	97	86	106	98	110	protein GREB1
LOC104910488	111	80	91	99	98	110	protein EFR3 homolog A-like
PURA	126	124	114	114	109	110	purine-rich element binding protein A
ATXN7L1	90	80	94	114	90	110	ataxin 7-like 1
LOC104910653							
	142	88	111	91	107	110	glutathione S-transferase C-terminal domain-containing protein-like
ASIC1	87	77	92	70	119	110	acid-sensing (proton-gated) ion channel 1
C1H1orf87	92	84	101	90	124	110	chromosome 1 open reading frame, human C11orf73
LOC104911374	107	69	123	91	113	110	uncharacterized LOC104911374
LOC100544327	173	131	136	133	143	110	ephrin type-A receptor 6-like
ADAT1	108	93	103	95	111	110	adenosine deaminase, tRNA-specific 1
HHIPL1	96	116	104	101	115	110	hedgehog interacting protein
LOC104916157	175	117	146	117	152	110	mothers against decapentaplegic homolog 4
PRKX	102	89	100	113	104	110	protein kinase, X-linked
LOC104911701	153	94	165	159	172	110	secretory phospholipase A2 receptor-like
WNT8B	127	108	86	106	175	109	wingless-type MMTV integration site family, member 8B
ITPK1							
	167	98	143	97	127	109	inosine triphosphatase (nucleoside triphosphate pyrophosphatase)
NFXL1	132	106	140	119	119	109	nuclear transcription factor, X-box binding-like 1
LOC104913014	102	104	105	104	120	109	adenylate cyclase type 7-like
KBTBD3	75	95	87	94	117	109	kelch repeat and BTB (POZ) domain containing 2
LOC104914147	100	83	101	92	106	109	conserved oligomeric Golgi complex subunit 5-like
PAX7	106	89	97	90	108	109	paired box protein Pax-7
STKLD1	107	98	117	90	105	109	serine/threonine kinase-like domain containing 1
UVSSA	139	125	126	124	124	109	UV-stimulated scaffold protein A
LOC104914624	129	89	103	93	96	109	beclin-1-like
THOC6	134	104	111	119	117	109	THO complex 6 homolog (Drosophila)
LOC100541485	166	171	180	131	144	109	tyrosine-protein phosphatase non-receptor type 11-like
PIGH	72	89	95	108	95	109	phosphatidylinositol glycan anchor biosynthesis, class H
LOC104917028	123	93	104	108	102	109	3 beta-hydroxysteroid dehydrogenase type 7-like
LOC104916837	131	100	110	85	106	109	ribonucleoprotein PTB-binding 1-like
LOC104914690	138	103	121	112	125	109	polypyrimidine tract-binding protein 1-like
LOC104910590	92	99	104	112	129	109	uncharacterized LOC104910590
LOC104915406	122	68	135	91	114	109	uncharacterized LOC104915406
BDKRB1	120	128	132	116	103	109	bradykinin receptor B1
TMEM17	128	117	114	127	116	109	transmembrane protein 17
LOC104915980	168	95	103	122	126	109	zinc finger protein 574-like
LOC100548608	115	88	126	85	123	108	uncharacterized LOC100548603
LOC104913379	101	87	100	114	152	108	uncharacterized LOC104913379
LOC100544253	122	105	113	121	107	108	protocadherin gamma-C3
LOC104916686	145	110	132	108	109	108	transcription activator BRG1-like
UNK	149	115	137	117	99	108	unkempt family zinc finger
LOC100546225	75	189	118	126	204	108	gastricsin-like
GCNT4	106	76	93	67	81	108	glucosaminyl (N-acetyl) transferase 3, mucin type
HS3ST3B1	131	69	111	94	93	108	heparan sulfate (glucosamine) 3-O-sulfotransferase 2
LOC100540008	82	146	75	183	233	108	uncharacterized LOC100540007
LOC104912581							phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit beta
	96	67	88	83	83	108	isoform-like
LOC100538679	134	108	116	87	119	108	centromere protein J-like
F2RL1	173	157	156	152	113	108	coagulation factor II (thrombin) receptor
LOC104910494							
	147	95	120	112	119	108	bromodomain adjacent to zinc finger domain protein 2A-like
LOC100546324	129	112	111	146	117	108	bromodomain containing 2
LOC104917342	169	88	123	73	106	108	cyclin-dependent kinase 2-like
KIAA0226L	97	96	91	137	107	108	KIAA0226 ortholog
SLC23A2							
	156	112	138	130	137	108	solute carrier family 23 (ascorbic acid transporter), member 2
LOC104917149	109	94	122	94	71	108	structural maintenance of chromosomes protein 5-like
LOC100544294	139	108	118	109	106	107	proactivator polypeptide-like
TMEM108	118	114	145	83	68	107	transmembrane protein 108
LOC100539738	73	107	74	109	77	107	nuclear receptor subfamily 4 group A member 2-like
CCND2	105	99	108	117	117	107	cyclin D1
NEU3	126	107	138	93	115	107	sialidase 3 (membrane sialidase)

CA10	77	60	108	73	99	107	chromosome 9 open reading frame, human CXorf65
APCDD1	126	98	122	90	120	107	adenomatosis polyposis coli down-regulated 1
LOC104910337	89	82	88	111	92	107	dystrobrevin alpha-like
LOC104912030	114	112	100	118	96	107	shootin-1-like
UNC5B	174	111	135	116	160	107	unc-5 homolog B (C. elegans)
PAPPA	123	144	131	96	87	107	pregnancy-associated plasma protein A, pappalysin 1
LOC104915234	141	93	167	90	89	107	lamin-B1-like
PCSK1	87	136	89	64	60	107	proprotein convertase subtilisin/kexin type 1
CENPL	139	76	109	75	86	107	centromere protein K
LOC104910694							
	124	75	132	91	82	107	bifunctional 3'-phosphoadenosine 5'-phosphosulfate synthase 1-like
PKP1	145	141	131	126	42	107	plakophilin 1
PEX12	134	129	134	120	109	107	peroxisomal biogenesis factor 12
LOC104917018	142	135	131	123	143	107	protein Wiz-like
NHS							
	105	113	113	100	96	107	Nance-Horan syndrome (congenital cataracts and dental anomalies)
LOC104914277	117	106	153	92	114	107	complement C2-like
LOC104912991	111	124	92	104	110	107	uncharacterized LOC104912991
LOC104915439	116	102	109	85	72	107	uncharacterized LOC104915439
DLG2	168	95	157	123	134	106	discs, large homolog 1 (Drosophila)
CCDC40	100	111	119	122	93	106	coiled-coil domain containing 39
LOC100548731							
	130	189	184	156	96	106	chitobiosyldiphosphodolichol beta-mannosyltransferase-like
CSF1	145	123	131	114	149	106	cold shock domain containing E1, RNA-binding
RSAD1	112	77	98	62	106	106	radical S-adenosyl methionine domain containing 1
LOC104911232	118	114	98	125	102	106	endoribonuclease Dicer-like
LOC100549070	114	83	125	98	108	106	kalirin-like
ADAP2	104	112	112	145	150	106	ArfGAP with dual PH domains 2
KIAA1328	113	84	114	87	91	106	KIAA1324-like ortholog
CPN1	79	130	99	94	73	106	carboxypeptidase M
SLC26A2	130	78	119	101	102	106	solute carrier family 26 (anion exchanger), member 2
LOC100541607	145	91	120	161	188	106	golgin subfamily B member 1-like
LOC104912209	119	95	100	97	103	106	Cdc42 guanine nucleotide exchange factor (GEF) 9
LOC100549601	125	115	137	123	123	106	merlin-like
STOML3	14	64	17	125	79	106	stomatin (EPB72)-like 3
DHRS11	113	90	97	87	90	106	dihydroorotate dehydrogenase (quinone)
LOC104910868	124	108	116	150	127	106	huntingtin-like
DCP1B	97	96	103	122	97	106	decapping mRNA 1A
DYNC2L1	98	87	124	91	109	105	dynein, cytoplasmic 2, heavy chain 1
LOC100549172	103	94	114	105	104	105	mannose-binding protein A-like
PHLDA2	195	110	151	85	129	105	pleckstrin homology-like domain, family A, member 2
LOC104911278	95	49	33	93	35	105	actin-related protein 10-like
HNF1A	140	102	133	84	125	105	hematological and neurological expressed 1-like
LOC104915142	103	76	114	91	81	105	serine palmitoyltransferase 1
LOC104914061	113	83	102	109	98	105	protein kinase C-binding protein 1-like
ASB7	121	93	115	94	105	105	ankyrin repeat and SOCS box containing 7
LOC104914968	93	89	126	97	85	105	DNA polymerase kappa-like
LOC104910644							ectonucleotide pyrophosphatase/phosphodiesterase family member 6-like
	98	126	128	99	88	105	
LOC104909364	108	89	124	96	78	105	zinc finger protein 131-like
LOC104912656	111	110	96	90	80	105	lipoma-preferred partner homolog
FGF4	156	127	120	106	101	105	fibroblast growth factor 3
RAB11FIP5	76	96	107	125	107	105	RAB11 family interacting protein 5 (class I)
MYO1D	96	154	114	123	104	105	myosin ID
LOC104916260	55	116	106	133	75	105	sestrin-2-like
RADIL	80	135	100	107	98	105	Ras association and DIL domains
MAR1							
	102	101	108	124	78	105	membrane-associated ring finger (C3HC4) 1, E3 ubiquitin protein ligase
LOC104915569	98	94	124	125	95	105	integrin alpha-1-like
NCF4	157	118	176	86	182	105	neutrophil cytosolic factor 4, 40kDa
LOC104914528							
	104	104	86	94	120	104	high affinity cGMP-specific 3',5'-cyclic phosphodiesterase 9A-like
LOC104909298	107	173	96	145	103	104	mitogen-activated protein kinase kinase kinase 15-like
LOC104910857	102	86	107	92	113	104	lateral signaling target protein 2 homolog
FZD7	142	100	121	92	102	104	frizzled class receptor 6
LOC104914825	118	154	109	135	111	104	atrial natriuretic peptide receptor 1-like
LOC104912270	110	74	105	70	82	104	uncharacterized LOC104912270
OTULIN	156	111	127	96	107	104	OTU deubiquitinase with linear linkage specificity
STYK1	118	164	92	112	100	104	serine/threonine/tyrosine kinase 1
BCDIN3D	123	108	117	90	108	104	BCDIN3 domain containing
PRDM5	111	103	127	98	105	104	PR domain containing 5
XYLB	113	94	124	93	81	104	xylulokinase homolog (H. influenzae)
LOC104912792	150	110	113	166	114	104	probable E3 ubiquitin-protein ligase HERC1
B3GNTL1							
	119	80	121	117	124	104	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase-like 1
LOC104915089	93	75	85	103	87	103	uncharacterized LOC104915089
KIAA1522	109	115	119	116	116	103	KIAA1468 ortholog
LOC104912861	103	97	101	89	89	103	uncharacterized LOC104912861
FYB	88	83	114	107	123	103	FXD domain containing ion transport regulator 6

P2RX7	91	119	99	105	94	103	purinergic receptor P2X, ligand-gated ion channel, 7
LOC100545615	102	86	100	103	101	103	mucin-16-like
LOC104911918	89	101	85	127	116	103	ankyrin-3-like
LOC104915110	109	93	106	116	105	103	uncharacterized LOC104915110
LOC104916781	80	94	83	86	95	103	titin-like
ID2	112	135	136	90	112	103	inhibitor of DNA binding 1, dominant negative helix-loop-helix protein
GABRB1	114	112	123	99	109	103	gamma-aminobutyric acid (GABA) A receptor, alpha 6
LOC104912474	124	98	112	106	96	103	E3 ubiquitin-protein ligase RNF220-like
LOC104909256	82	85	105	113	87	103	N-alpha-acetyltransferase 16, NatA auxiliary subunit-like
VWA3A	105	72	108	91	84	103	von Willebrand factor A domain containing 3A
LOC104911770	153	104	144	129	126	103	prolyl endopeptidase FAP-like
HDHD1	115	85	116	83	119	103	hepatoma-derived growth factor
LOC104914263	133	98	125	103	115	103	CAAX prenyl protease 1 homolog
LOC104913384	130	103	114	130	102	103	centriolar coiled-coil protein of 110 kDa-like
LOC104917541	84	98	80	116	82	103	voltage-dependent calcium channel subunit alpha-2/delta-1-like
LOC100543707	101	83	91	111	98	103	olfactory receptor 14J1-like
LOC104916906	145	116	114	120	121	103	uncharacterized LOC104916906
GNG11	124	129	124	124	104	103	glucosamine (UDP-N-acetyl)-2-epimerase/N-acetylmannosamine kinase
LOC104914341	95	103	103	91	91	103	uncharacterized LOC104914341
PORCN	102	82	100	87	95	103	porcupine homolog (Drosophila)
CCR5	98	77	83	88	94	103	chemokine (C-C motif) receptor 4
LOC104911754	109	92	87	127	82	102	epidermal growth factor receptor kinase substrate 8-like
GPR137B	87	92	93	118	101	102	G protein-coupled receptor 135
LOC100540872	106	127	95	124	112	102	keratin, type I cytoskeletal 19-like
LOC104913906	78	105	100	91	77	102	uncharacterized LOC104913906
KPTN	99	84	107	93	93	102	karyopherin alpha 7 (importin alpha 8)
DNAJC5B	106	77	107	83	104	102	DnaJ (Hsp40) homolog, subfamily C, member 5
LOC100547435	113	96	113	100	121	102	leucine-rich repeat-containing protein 74B
PCBP3	89	114	80	96	105	102	poly(rC) binding protein 3
PODXL2	151	143	138	118	157	102	podocalyxin-like 2
DCLK3	66	97	144	62	85	102	doublecortin-like kinase 2
GLDC	115	147	90	99	85	102	glucuronic acid epimerase
C5H11orf74	103	98	120	97	113	102	chromosome 5 open reading frame, human C11orf58
BAIAP2L1	92	106	77	96	86	102	BAI1-associated protein 2-like 1
TFAP4	151	111	133	101	108	102	transcription factor AP-4 (activating enhancer binding protein 4)
LOC100547404	249	67	116	159	340	102	NACHT, LRR and PYD domains-containing protein 1-like
LOC100543905	70	90	105	102	89	102	putative cation exchanger C521.04c
LOC104909831	69	100	64	114	84	102	sodium-coupled neutral amino acid transporter 4-like
SHC2	108	124	103	108	129	102	SHC (Src homology 2 domain containing) transforming protein 2
PAK7	145	93	112	67	85	102	p21 protein (Cdc42/Rac)-activated kinase 7
LOC100548954	146	116	119	118	128	102	alpha-catulin
LOC104911430	72	110	104	79	72	102	integrin alpha-8-like
LOC104917103	133	86	124	122	99	102	circumsporozoite protein-like
PIM1	162	117	135	118	130	102	Pim-1 proto-oncogene, serine/threonine kinase
LOC104910394	235	99	154	122	213	102	carbonic anhydrase 2-like
LOC100544371	85	86	89	98	88	102	mothers against decapentaplegic homolog 2
LOC100545203	128	114	115	139	89	102	neurofascin
COL27A1	107	170	115	139	93	102	collagen, type XXVI, alpha 1
TXNL4B	122	102	113	86	90	102	thioredoxin-like 4B
LOC104914647	101	78	98	73	72	102	GRAM domain-containing protein 2-like
SLC5A3	181	91	111	103	132	102	solute carrier family 5 (sodium/myo-inositol cotransporter), member 3
FHDC1	168	98	122	99	183	102	forkhead-associated (FHA) phosphopeptide binding domain 1
LOC104916866	154	111	138	130	110	101	transcription activator BRG1-like
LOC100542468	94	120	91	168	94	101	putative homeodomain transcription factor 2
LOC104917062	185	104	171	126	112	101	filamin-C-like
LOC100551228	110	91	104	71	86	101	filamin-interacting protein FAM101A-like
LOC104914847	74	64	71	84	72	101	uncharacterized LOC104914847
LOC104909850	100	78	117	100	95	101	tyrosine-protein kinase Fyn-like
PATL2	127	115	97	87	96	101	protein associated with topoisomerase II homolog 2 (yeast)
RNF223	160	107	108	103	130	101	ring finger protein 223
LOC100550869	147	100	135	111	121	101	putative polypeptide N-acetylgalactosaminyltransferase-like protein 3
RASGRF2	95	117	93	101	74	101	Ras protein-specific guanine nucleotide-releasing factor 2
C3	128	93	105	145	119	101	chromosome 2 open reading frame, human CXorf21
LOC100544291	128	133	119	130	203	101	contactin-associated protein-like 5
LOC100548072	104	70	87	63	93	101	cytosolic purine 5'-nucleotidase-like
TMEFF2	139	110	103	92	114	101	transmembrane protein with EGF-like and two follistatin-like domains 2
LOC104912401	98	73	119	102	125	101	uncharacterized LOC104912401
LOC100547721	100	85	120	103	99	101	myosin VI
RAB11FIP4	104	90	109	83	82	101	RAB11 family interacting protein 4 (class II)

LOC100548849	58	85	63	89	99	101	solute carrier family 22 member 2-like
PARK2	82	105	95	108	73	101	parkin RBR E3 ubiquitin protein ligase
LOC100540753	114	86	121	105	96	101	dual specificity protein phosphatase 13 isoform B-like
LOC104913769	118	84	108	97	105	100	pleckstrin homology-like domain family B member 2
LOC100540667	120	105	120	90	100	100	focadhesin-like
SERPIND1	91	199	96	169	92	100	serpin peptidase inhibitor, clade D (heparin cofactor), member 1
ST6GAL1	77	117	76	122	84	100	ST6 beta-galactosamide alpha-2,6-sialyltransferase 1
LRRC3C	79	88	75	99	92	100	leucine rich repeat containing 3C
CDK18	105	114	102	84	97	100	cyclin-dependent kinase 17
CD247	125	112	102	90	98	100	CD24 molecule
LOC104912992	126	87	119	97	92	100	E3 ubiquitin-protein ligase RFWD3-like
ACVR2B	95	98	83	79	70	100	activin A receptor, type IIB
ROBO1	171	112	152	91	95	100	roundabout, axon guidance receptor, homolog 1 (Drosophila)
LOC100541052	119	109	129	142	107	100	lymphocyte antigen 6E-like
LOC100548422	245	73	141	145	206	100	uncharacterized LOC100548407
LOC104912770	105	67	89	83	81	100	uncharacterized LOC104912770
KCTD7	111	100	119	79	108	100	potassium channel tetramerization domain containing 6
LOC100549911	106	71	106	77	77	100	vacuolar protein sorting-associated protein 29-like
PREPL	106	84	107	94	91	100	prolyl endopeptidase-like
LOC104917587	134	85	108	99	104	100	transcriptional coactivator YAP1-like
USP43	84	86	89	93	83	100	ubiquitin specific peptidase 43
LOC104914857	76	79	87	94	76	100	5'-AMP-activated protein kinase catalytic subunit alpha-1-like
LOC104910131	140	104	131	103	107	100	uncharacterized LOC104910131
LOC104912486	101	113	108	89	108	100	structure-specific endonuclease subunit SLX1-like
LOC100550412	67	146	90	155	84	100	connective tissue growth factor-like
LOC104910956	151	73	125	95	106	100	mitotic checkpoint serine/threonine-protein kinase BUB1 beta-like
LOC104914873	208	116	182	150	171	100	integrin alpha-2-like
SCML2	139	82	129	84	110	100	sex comb on midleg-like 2 (Drosophila)
GALNS	96	91	110	105	115	99	galactose mutarotase (aldose 1-epimerase)
IL34	71	100	66	101	88	99	interleukin 31 receptor A
LOC104911163	81	86	98	134	103	99	ryanodine receptor 3-like
GALNT15	90	127	93	109	93	99	polypeptide N-acetylgalactosaminyltransferase 14
LINS	101	81	109	82	93	99	leucine rich repeat and Ig domain containing 3
APCDD1L	122	182	126	146	181	99	adenomatosis polyposis coli down-regulated 1-like
LOC104916031	192	117	170	110	133	99	zinc finger protein 865-like
VGLL1	75	110	71	109	80	99	vestigial-like family member 1
LOC104911857	69	89	62	92	81	99	thrombospondin type-1 domain-containing protein 7B-like
LOC100540213	105	95	114	108	102	99	phosphatidylinositol 3,4,5-trisphosphate 3-phosphatase TPTE2-like
DPYSL4	93	68	90	78	59	99	dihydropyrimidinase
LOC100540723	101	103	88	75	55	99	uncharacterized LOC100540713
CELF1	111	126	131	136	134	99	chymotrypsin-like elastase family, member 1
LOC100538412	79	114	69	122	79	99	guanylyl cyclase-activating protein 1-like
LOC104910368	88	81	103	89	100	98	uncharacterized LOC104910368
WDYHV1	92	100	132	107	90	98	WDYHV motif containing 1
PGR	111	125	126	104	148	98	progesterone receptor
LOC104914184	124	116	121	163	111	98	vacuolar protein sorting-associated protein 13D-like
GPR176	115	84	111	84	84	98	G protein-coupled receptor 174
CREG1	133	86	99	145	143	98	CREB3 regulatory factor
C23H1orf174	167	102	142	94	108	98	chromosome 23 open reading frame, human C1orf167
P2RY6	98	87	100	81	119	98	pyrimidinergic receptor P2Y, G-protein coupled, 6
LOC104915443	90	75	106	88	91	98	NF-X1-type zinc finger protein NFXL1-like
LOC104915987	122	102	106	120	102	98	zinc finger protein OZF-like
FBXL4	95	96	111	140	112	98	F-box and leucine-rich repeat protein 3
ADAMTS4	118	110	85	95	86	98	ADAM metalloproteinase with thrombospondin type 1 motif, 4
LOC100542618	91	113	97	145	147	98	neuronal pentraxin receptor-like
LOC100549732	114	100	90	123	101	98	N-chimaerin
SPIRE1	112	97	108	90	77	98	spire-type actin nucleation factor 1
LOC104911453	92	85	87	85	86	98	uncharacterized LOC104911453
ELMO3	106	75	76	84	107	98	engulfment and cell motility 2
WASF1	136	98	121	100	94	98	WAS protein family, member 1
LOC104912027	117	80	104	82	91	98	transcription factor 7-like 2
IQCK	66	89	63	84	60	98	IQ motif containing J
ADAMTS3	53	77	78	75	72	98	ADAM metalloproteinase with thrombospondin type 1 motif, 3
LOC104915253	93	90	90	100	70	98	KIAA0825
PRICKLE2	104	99	115	83	113	98	prickle homolog 2 (Drosophila)
LOC104913741	86	115	125	111	135	98	kinesin-like protein KIF21A
LOC104913035	132	83	122	93	82	97	uncharacterized LOC104913035
SYCP2	83	115	114	125	84	97	synaptonemal complex protein 2
CIB2	83	70	97	83	83	97	calcium and integrin binding 1 (calmyrin)
LOC104916721	121	105	107	112	95	97	mitogen-activated protein kinase 7
GLYCTK	100	94	89	92	88	97	glycine-N-acyltransferase-like 3
LOC104910387	109	86	107	117	96	97	copine-3-like

LOC104911938	83	70	68	67	62	97	uncharacterized LOC104911938
LOC100544459	169	129	142	131	127	97	epidermal differentiation-specific protein-like
TCTE3	64	68	77	79	69	97	t-complex-associated-testis-expressed 3
LOC104916182	123	115	112	111	104	97	TSC22 domain family protein 1-like
NOV	152	402	186	279	300	97	nephroblastoma overexpressed
LOC104913418	98	93	90	86	87	97	E3 ubiquitin-protein ligase RNF216-like
VEGFC	59	80	87	68	84	97	vascular endothelial growth factor C
LOC104909332	12	41	23	81	35	97	deleted in malignant brain tumors 1 protein-like
LOC104912451	101	85	100	107	116	97	uncharacterized LOC104912451
LOC104917161	136	106	125	99	100	97	tripartite motif containing 28
LOC104911318	53	118	64	103	71	97	uncharacterized LOC104911318
LOC104914889	86	68	77	89	60	97	ATP-dependent RNA helicase DHX29-like
LOC104915022	83	80	98	92	86	97	uncharacterized LOC104915022
TAF6							TAF6 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 80kDa
LOC100540209	122	140	97	107	105	97	histone H2B 1/2/3/4/6-like
CAMK2B	135	91	117	92	120	97	calcium/calmodulin-dependent protein kinase II alpha
LOC100550431	91	72	84	90	84	96	grainyhead like transcription factor 1
LOC100545931	60	85	62	80	54	96	GDNF-inducible zinc finger protein 1-like
ALPK1	19	68	25	79	40	96	alpha-kinase 1
LOC104917403	109	155	151	179	118	96	uncharacterized LOC104917403
FAM189A1	223	100	191	95	170	96	family with sequence similarity 188, member B
LOC104916502	123	117	111	93	84	96	CLK4-associating serine/arginine rich protein-like
LOC104911408	105	90	95	92	84	96	CAS1 domain-containing protein 1-like
TSTD3	80	74	79	82	80	96	thiosulfate sulfurtransferase (rhodanese)-like domain containing 3
POLN	98	82	91	78	91	96	polymerase (DNA directed) nu
LOC100541903	110	84	98	86	79	96	histone H2B 8-like
LOC104910198	125	80	96	94	98	96	uncharacterized LOC104910198
NLGN4X	130	106	117	110	107	96	neurologin 4, X-linked
NIM1K	120	119	94	111	78	96	NIM1 serine/threonine protein kinase
LOC104910940	67	66	77	50	84	96	membrane-spanning 4-domains subfamily A member 15-like
LOC104913333	95	66	85	72	107	96	rho GTPase-activating protein 26-like
LOC104911995	132	86	127	88	99	96	uncharacterized LOC104911995
PARD6B	107	92	86	105	101	96	par-6 family cell polarity regulator beta
TIGD5	124	97	116	105	118	96	tigger transposable element derived 5
LOC104910258	89	101	96	113	94	96	receptor-type tyrosine-protein phosphatase mu-like
CLYBL	93	105	98	85	96	96	clavesin 2
ST6GAL2	117	95	123	102	97	96	ST6 beta-galactosamide alpha-2,6-sialyltransferase 2
LOC104916672	110	79	110	71	85	96	histone H1.10
FABP7	85	88	99	80	90	95	fatty acid binding protein 6, ileal
LIMD2	124	45	116	45	58	95	LIM domains containing 1
LOC104912127	120	84	106	89	108	95	lysine-specific demethylase 5A-like
LOC100551326	118	82	106	99	104	95	kazal-type serine protease inhibitor domain-containing protein 1-like
LOC100538736	139	57	162	84	75	95	carboxymethylenebutenolidase homolog
CRLF1	110	71	104	79	125	95	v-crk avian sarcoma virus CT10 oncogene homolog-like
ZNF653	105	72	104	98	102	95	zinc finger protein 653
RNF144B	116	109	101	91	98	95	ring finger protein 144B
KCNK5	69	73	66	89	57	95	potassium channel, subfamily K, member 3
LOC104914853	141	94	125	94	76	95	5'-AMP-activated protein kinase catalytic subunit alpha-1-like
LRRRC1	85	105	100	125	69	95	leucine rich repeat containing 1
LOC100547383	120	92	123	82	86	95	WW domain-containing oxidoreductase-like
C10H1orf226	131	99	103	104	112	95	chromosome 10 open reading frame, human C1orf210
LOC100550661	119	101	137	102	173	95	derlin 3
FGF6	80	74	91	78	87	95	fibroblast growth factor 5
HDAC10	114	67	90	126	102	95	histone deacetylase 1
LOC100548761	127	90	132	110	94	95	USH1 protein network component harmonin
SELP	85	91	86	99	95	95	selectin P (granule membrane protein 140kDa, antigen CD62)
LOC100538956	90	57	86	115	102	95	dynammin-3-like
LOC100549331	112	133	119	121	96	95	transmembrane 4 L6 family member 1-like
TSHZ3	163	142	119	70	82	95	teashirt zinc finger homeobox 3
ADAMTS6	88	104	122	94	89	94	ADAM metalloproteinase with thrombospondin type 1 motif, 6
SERPINF2	77	99	121	87	78	94	serpin peptidase inhibitor, clade F (alpha-2 antiplasmin, pigment epithelium derived factor), member 2
GEM	94	114	103	96	88	94	GDP-D-glucose phosphorylase 1
OGFRL1	110	138	138	129	146	94	opioid growth factor receptor-like 1
LOC104917573	101	85	97	96	87	94	uncharacterized LOC104917573
KRT222	132	70	123	130	211	94	keratin 20
SEMA4C	56	68	80	71	93	94	sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4C
USP42	142	103	123	105	115	94	ubiquitin specific peptidase 42
SLC31A2	124	78	103	92	98	94	solute carrier family 31 (copper transporter), member 2
AQP9	128	91	95	81	107	94	aquaporin 9
ZFAT	102	95	101	98	111	94	zinc finger and AT hook domain containing
	82	77	87	85	81	94	

LOC100539767	42	100	57	155	79	94	olfactory receptor 1052-like
IGFBP2	150	133	115	136	104	94	insulin-like growth factor binding protein 1
LOC104916090	131	113	127	115	117	94	extended synaptotagmin-1-like
RGS18	92	71	92	91	97	94	regulator of G-protein signaling 18
LOC104914687	125	88	114	90	118	94	minor histocompatibility protein HA-1-like
LOC104911907	135	119	125	132	156	94	uncharacterized LOC104911907
LOC100550523	125	91	116	94	114	94	proto-oncogene tyrosine-protein kinase Yrk-like
LOC100545599	129	125	147	91	149	94	uncharacterized LOC100545589
LOC104910568	113	108	94	77	92	94	uncharacterized LOC104910568
PLEKHA6	95	115	86	86	82	94	pleckstrin homology domain containing, family A member 6
LOC104909653	82	77	92	88	65	94	disheveled-associated activator of morphogenesis 2-like
LOC100546243	134	104	128	93	107	93	heterochromatin-associated protein MENT
BBS12	118	92	116	84	86	93	Bardet-Biedl syndrome 12
PNPLA4	86	100	102	104	82	93	patatin-like phospholipase domain containing 4
LOC104911407	113	95	99	113	93	93	neurabin-1 pseudogene
LOC104911504	130	109	117	116	123	93	serine/threonine-protein kinase B-raf-like
DOCK3	108	106	92	122	95	93	dedicator of cytokinesis 2
CIART	93	129	114	62	94	93	cytokine induced apoptosis inhibitor 1
LOC104910352	126	88	123	81	73	93	uncharacterized LOC104910352
C17H12orf43	104	71	94	53	79	93	chromosome 17 open reading frame, human C11orf85
LOC104917184	119	89	81	93	81	93	uncharacterized LOC104917184
LOC104914271	67	72	57	44	98	93	cAMP-dependent protein kinase inhibitor beta-like
LOC100545600	156	81	104	193	96	93	ATP-binding cassette sub-family A member 9
LOC104914568	113	86	93	124	135	93	serine/threonine-protein kinase tousled-like 2
LOC104909949	134	96	127	79	77	93	DNA primase large subunit-like
LOC100543282	29	80	32	72	49	93	transient receptor potential cation channel subfamily M member 6-like
LOC104911740	64	102	68	45	43	93	uncharacterized LOC104911740
LOC104912548	111	65	94	87	86	93	transcription factor Dp-2
LOC104912175	97	85	96	83	87	93	uncharacterized LOC104912175
KIAA1210	115	92	118	90	107	93	KIAA1191 ortholog
PLEKHN1	100	95	104	103	108	93	pleckstrin homology domain containing, family N member 1
LOC104910657	75	65	86	71	61	93	TBC domain-containing protein kinase-like protein
DOK4	104	82	100	64	97	93	docking protein 3
LOC104911730	118	88	117	100	104	93	cytoplasmic dynein 1 intermediate chain 2-like
VAMP1	79	52	74	81	128	93	vesicle-associated membrane protein 1 (synaptobrevin 1)
CSRNP2	99	89	86	93	110	93	cysteine-serine-rich nuclear protein 1
CERK	133	112	108	116	117	93	cerebral endothelial cell adhesion molecule
PPP2R2B	105	68	98	65	71	93	protein phosphatase 2, regulatory subunit B, beta
RHBG	112	107	139	90	109	92	Rh family, B glycoprotein
KCNQ5	70	99	82	110	84	92	potassium voltage-gated channel, KQT-like subfamily, member 3
LOC104910444	409	210	246	134	261	92	uncharacterized LOC104910444
LOC104916751	80	73	80	90	83	92	LIX1-like protein
EPB42	157	82	107	141	152	92	erythrocyte membrane protein band 4.1 like 4B
LOC104914241	117	101	112	111	112	92	phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit gamma isoform-like
LOC104914108	98	81	87	74	68	92	uncharacterized LOC104914108
FAM161A	117	102	100	86	93	92	family with sequence similarity 160, member B1
LOC104914314	90	68	85	66	67	92	claspain-like
LOC104910467	107	90	120	104	102	92	focal adhesion kinase 1-like
NAT6	95	112	90	99	87	92	N-acetyltransferase 6 (GCN5-related)
LOC104910266	87	70	91	84	92	92	uncharacterized LOC104910266
ZBTB16	80	154	112	235	53	92	zinc finger and BTB domain containing 16
RNF169	124	109	134	109	105	92	ring finger protein 169
LOC104909515	131	81	117	98	91	92	son of sevenless homolog 1-like
TCTEX1D2	87	84	90	83	69	92	Tctex1 domain containing 2
IFT27	108	93	108	92	93	92	intraflagellar transport 22
LOC100544020	84	80	99	80	82	92	AP-4 complex subunit epsilon-1-like
LOC104915004	82	55	87	80	57	92	uncharacterized LOC104915004
ATP10D	92	67	93	73	87	92	ATPase, class V, type 10D
FIG4	120	80	98	84	92	92	FIC domain containing
UGT8	106	175	115	123	105	92	UDP glycosyltransferase 8
LOC104913777	33	114	35	78	46	92	coiled-coil domain-containing 57
LOC104909787	164	75	139	70	96	92	uncharacterized LOC104909787
SPOCK3	109	102	91	82	109	92	sparc/osteonectin, cwcv and kazal-like domains proteoglycan (testican) 3
SYNGR3	94	69	91	86	91	92	synaptogyrin 3
HSD11B2	202	116	165	98	112	92	HscB mitochondrial iron-sulfur cluster co-chaperone
LOC104917621	97	71	90	84	83	92	exportin-4-like
LOC104910987	144	79	149	121	98	92	AMP deaminase 3-like
LOC104909673	131	86	123	112	105	92	tetratricopeptide repeat protein 27-like
LOC104913520	93	76	76	46	52	91	uncharacterized LOC104913520
LOC104912499	171	102	139	66	86	91	origin recognition complex subunit 1-like
LOC104917200	26	116	46	128	49	91	uncharacterized LOC104917200
GLT1D1	70	73	80	75	72	91	glutaminase
LOC104916535	117	94	108	100	105	91	egl nine homolog 1-like
LOC100545427	72	103	82	108	102	91	diphthine--ammonia ligase-like
LOC100542219	105	73	86	96	131	91	DnaJ heat shock protein family (Hsp40) member C5 beta

LOC104913339	107	90	84	133	95	91	protein Jade-2-like
GPR126	131	96	118	129	121	91	G protein-coupled receptor 125
LOC100551338	129	86	125	87	129	91	cathepsin L1-like
GPATCH1	130	111	112	108	102	91	glycerol-3-phosphate acyltransferase 2, mitochondrial
LOC104911459	92	74	73	92	81	91	host cell factor 2-like
LOC104910636	78	67	80	89	82	91	N(4)-(beta-N-acetylglucosaminy)-L-asparaginase-like
LOC104916195	108	83	95	71	92	91	heparan-sulfate 6-O-sulfotransferase 1-like
LOC104912494	94	80	64	68	74	91	cytochrome P450 2J2-like
NEFL	72	95	55	67	40	91	neurofilament, light polypeptide
FMN1							
	117	84	117	108	92	91	feline leukemia virus subgroup C cellular receptor family, member 2
TEC	111	107	99	99	132	91	tec protein tyrosine kinase
LOC104911939	96	55	77	78	71	91	uncharacterized LOC104911939
ACER2	99	88	95	86	84	91	alkaline ceramidase 2
PCSK9	61	92	58	66	75	91	proprotein convertase subtilisin/kexin type 9
LOC100543069	128	136	127	129	99	91	tubulin monoglycylase TTL3
LOC104910890	49	50	73	72	58	91	uncharacterized LOC104910890
FBXL17	96	73	82	99	74	91	F-box and leucine-rich repeat protein 16
LOC104915189	76	82	95	92	67	91	chromodomain-helicase-DNA-binding protein 1-like
LOC104911600	88	92	87	107	79	90	WASH complex subunit CCDC53-like
LOC100543464	109	77	103	84	103	90	desmoglein-4
LOC100544056							
	96	88	105	89	94	90	scavenger receptor cysteine-rich domain-containing group B protein-like
GALNT3	66	93	77	94	61	90	polypeptide N-acetylgalactosaminyltransferase 2
DUSP5	130	79	99	73	72	90	dual specificity phosphatase 4
LOC104911413	100	86	129	88	94	90	coiled-coil domain-containing protein 132-like
LOC104909471	89	97	75	107	77	90	uncharacterized LOC104909471
SPHKAP	125	113	123	146	132	90	SPHK1 interactor, AKAP domain containing
TACSTD2	94	109	91	94	91	90	tumor-associated calcium signal transducer 2
TMPPE							
	128	113	92	83	80	90	transmembrane protein with metallophosphoesterase domain
SLC15A2							
	53	68	47	70	56	90	solute carrier family 15 (oligopeptide transporter), member 2
PLEKHA5	77	98	89	126	79	90	pleckstrin homology domain containing, family A member 5
LOC104910783	90	59	116	76	67	90	WD repeat-containing protein 36-like
LOC104912076	82	118	91	93	78	90	uncharacterized LOC104912076
LOC104911395	107	86	108	113	101	90	partitioning defective 3 homolog
ERI2	126	89	105	66	71	90	exoribonuclease 1
LOC104913920	105	62	80	61	83	90	uncharacterized LOC104913920
DEF8	140	105	124	113	113	90	differentially expressed in FDCP 6 homolog (mouse)
TNXB	94	129	68	121	108	90	tenascin XB
LOC104909604	79	105	66	58	58	90	uncharacterized LOC104909604
PANX3	101	98	80	86	108	90	pannexin 3
POU2F1	134	91	103	102	118	90	POU class 2 homeobox 1
TBCC	91	90	91	89	86	90	tubulin folding cofactor C
C1QTNF6	110	79	114	93	99	90	C1q and tumor necrosis factor related protein 5
LOC104912059	114	92	117	101	100	90	dedicator of cytokinesis protein 1-like
LOC100549452							
	105	84	104	76	81	90	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase zeta-1-like
FN3K	105	87	105	87	86	90	fibronectin 1
NRG3	121	88	115	89	81	90	neuregulin 3
LOC104917434	86	68	84	68	78	89	UDP-glucose:glycoprotein glucosyltransferase 2-like
LOC104912085	43	233	57	180	88	89	uncharacterized LOC104912085
LOC104915143	97	76	115	85	79	89	uncharacterized LOC104915143
LOC104914166	94	83	86	117	78	89	arginine-glutamic acid dipeptide repeats protein-like
KIAA0930	117	94	109	97	92	89	KIAA0922 ortholog
LOC104916451	130	72	129	83	106	89	uncharacterized LOC104916451
MATN3	86	185	125	115	110	89	matrilin 3
IPPK	134	101	113	112	114	89	intracisternal A particle-promoted polypeptide
CAMKK1	106	83	86	71	95	89	calcium/calmodulin-dependent protein kinase IV
LOC100548295	158	93	165	109	147	89	transcription factor PU.1-like
LOC104909370	98	64	86	69	85	89	5-hydroxytryptamine receptor 7-like
BAIAP2	104	97	100	89	99	89	BAI1-associated protein 2
LOC100546808	114	83	105	89	103	89	7-alpha-hydroxycholest-4-en-3-one 12-alpha-hydroxylase
GGCX	89	80	85	76	78	89	gamma-glutamylcyclotransferase
ASMTL	82	71	127	73	87	89	acetylserotonin O-methyltransferase-like
VEPH1	365	93	203	32	67	89	ventricular zone expressed PH domain-containing 1
PLEKHS1	91	35	100	59	138	89	pleckstrin homology domain containing, family S member 1
DAZAP2	123	89	107	86	95	89	DAZ associated protein 1
TMEM37	101	93	130	105	135	89	transmembrane protein 37
WNT2B	125	173	104	143	236	89	wingless-type MMTV integration site family, member 2B
LOC100539914	125	83	115	56	99	89	leucine zipper protein 2-like
STOX2	97	88	117	88	89	89	storkhead box 2
LOC104916088	98	91	103	79	69	89	uncharacterized LOC104916088
LOC104916266	125	122	89	80	73	89	noggin-2-like
LOC104915392	94	84	106	92	90	89	uncharacterized LOC104915392
PRSS12	111	118	109	94	94	89	protease, serine, 12 (neurotrypsin, motopsin)
ADAMTS13							
	58	103	63	109	76	89	ADAM metalloproteinase with thrombospondin type 1 motif, 13

SCG3	120	105	113	128	87	88	secretogranin III
CCNE2	151	94	122	91	90	88	cyclin D-type binding-protein 1
RSPH9	93	95	79	88	75	88	radial spoke head 9 homolog (Chlamydomonas)
LOC104913486	123	69	109	79	73	88	leucine carboxyl methyltransferase 1-like
FES	107	89	111	86	125	88	fermitin family member 2
LOC100538957	71	92	89	95	115	88	multidrug and toxin extrusion protein 1-like
NTF3	83	90	89	90	95	88	neurotrophin 3
LOC104914363	93	88	101	88	92	88	uncharacterized LOC104914363
S1PR4	117	89	113	84	94	88	sphingosine-1-phosphate receptor 4
ARHGEF10	110	105	108	101	93	88	Rho guanine nucleotide exchange factor (GEF) 10
ACVR1B	128	94	124	122	105	88	activin A receptor, type IB
ARHGAP39	92	67	81	75	63	88	Rho GTPase activating protein 39
ACACB	94	1122	111	887	76	88	acetyl-CoA carboxylase beta
TAPBP1	113	94	97	99	108	88	TAP binding protein-like
LOC100541835							
	109	63	98	66	79	88	disintegrin and metalloproteinase domain-containing protein 9-like
CD9	138	157	141	115	116	88	CD8b molecule
PLCH1	97	87	77	82	73	88	phospholipase C, eta 1
LOC104910999	111	93	102	71	82	88	vitamin D 25-hydroxylase-like
LOC104917435	72	62	89	70	74	88	UDP-glucose:glycoprotein glucosyltransferase 2-like
LOC104910553	78	68	79	56	58	88	uncharacterized LOC104910553
LOC104911636	98	70	124	74	96	88	UPF0606 protein KIAA1549-like
CPEB2	80	88	90	69	82	88	cytoplasmic polyadenylation element binding protein 1
LOC100538605	99	89	89	60	80	88	glutathione S-transferase theta-1
GRHL3	126	72	101	72	90	88	grainyhead-like 2 (Drosophila)
LOC100541160	66	84	80	81	105	88	neural-cadherin-like
ERICH1	98	90	106	85	100	88	ERI1 exoribonuclease family member 3
LOC100539445	97	97	117	112	79	88	uncharacterized LOC100539441
LOC104911248	78	84	58	112	116	88	exocyst complex component 3-like protein
LOC104914760	103	64	97	65	77	88	nucleolar protein 6
LOC100539332							
	94	71	83	72	77	88	potassium voltage-gated channel subfamily KQT member 4-like
LOC100543634	103	53	77	46	52	88	sodium channel protein type 5 subunit alpha-like
LOC104913639	103	78	105	100	81	88	integrator complex subunit 3-like
LOC104911256	111	89	102	81	91	87	ras GTPase-activating-like protein IQGAP3
LOC104914804	84	79	102	99	77	87	RAB6A-GEF complex partner protein 2-like
MFS12	117	85	99	70	83	87	major facilitator superfamily domain containing 12
LOC100539591	114	74	112	83	92	87	chromodomain-helicase-DNA-binding protein 1-like
TOM111	129	81	114	78	101	87	target of myb1 (chicken)-like 1
LOC104911940	92	64	83	67	63	87	uncharacterized LOC104911940
CLEC16A	106	85	106	111	99	87	claudin domain containing 1
CPSF7	111	91	95	90	82	87	cleavage and polyadenylation specific factor 6, 68kDa
KCTD21	100	91	104	93	111	87	potassium channel tetramerization domain containing 20
OSCP1	97	92	95	84	82	87	organic solute carrier partner 1
MOGS	112	97	93	100	103	87	mannosyl-oligosaccharide glucosidase
LOC104916946							
	109	58	92	59	85	87	putative tRNA (cytidine(32)/guanosine(34)-2'-O)-methyltransferase
CRISPLD2	76	110	73	100	115	87	cysteine-rich secretory protein LCCL domain containing 1
LOC100545524	107	71	101	89	83	87	tubulin alpha-2 chain
LOC104914665	89	60	78	68	79	87	uncharacterized LOC104914665
FAM180B	94	97	99	126	122	87	family with sequence similarity 180, member A
RAB31P	101	75	76	66	72	87	RAB3A interacting protein
SLC46A3	81	83	72	89	91	87	solute carrier family 46, member 3
LOC104910761	68	87	83	91	83	87	uncharacterized LOC104910761
LOC100543007	129	97	96	52	95	87	kelch-like protein 41
LOC104913804	81	68	59	79	58	87	uncharacterized LOC104913804
KIAA2022	84	77	91	83	63	87	KIAA2018 ortholog
LOC104915331	102	76	122	112	80	87	connector enhancer of kinase suppressor of ras 2-like
LOC100541460	98	68	81	97	86	87	SITS-binding protein-like
LOC104914828							
	80	73	82	96	76	86	A disintegrin and metalloproteinase with thrombospondin motifs 12
ZMYND12	74	99	101	85	100	86	zinc finger, MYND-type containing 12
LOC100541274	90	86	99	85	82	86	PR domain zinc finger protein 2-like
DNAJC24	94	76	116	81	89	86	DnaJ (Hsp40) homolog, subfamily C, member 22
FMNL1	105	78	81	87	93	86	formin 1
PRRX1	94	92	96	75	91	86	paired related homeobox 1
LOC104916372	129	82	108	111	100	86	constitutive coactivator of PPAR-gamma-like protein 1
LOC104916465	96	75	76	70	69	86	nucleoside diphosphate kinase 6-like
UGCG	78	68	92	93	63	86	UDP-glucose ceramide glucosyltransferase
LOC104917186	91	79	83	95	90	86	beta-arrestin-1-like
LOC100538933	59	69	64	70	61	86	short transient receptor potential channel 4
ARHGAP1	118	77	109	90	97	86	Rho GTPase activating protein 1
INSC	97	72	104	80	85	86	insulin
ASPHD2	111	86	96	56	70	86	aspartate beta-hydroxylase domain containing 2
RTN4RL2	107	90	93	98	128	86	reticulon 4 receptor-like 2
LOC104910608	121	107	102	153	114	86	WD repeat and FYVE domain-containing protein 3
LOC104916989	101	83	111	83	88	86	DNA-directed RNA polymerase II subunit RPB1-like
RAB3A	91	94	89	101	116	86	RAB3A, member RAS oncogene family
LOC104914919	84	57	107	67	58	86	importin-11-like

LOC104913568	78	92	90	87	91	86	beta-adrenergic receptor kinase 2-like
LOC104910565	32	71	67	86	193	85	uncharacterized LOC104910565
LOC100549110	81	86	90	69	71	85	cytochrome c oxidase subunit 6C
LOC104916759							
	105	70	98	88	81	85	phosphatidylinositol 3,4,5-trisphosphate 5-phosphatase 2-like
LOC104911312	99	76	128	93	113	85	cytokine receptor common subunit beta-like
LOC104916959	82	84	74	83	82	85	WD repeat-containing protein 55-like
LOC100541057	97	74	80	77	92	85	serine/threonine-protein kinase tousled-like 1
KCNN2							potassium large conductance calcium-activated channel, subfamily M, beta member 4
	65	60	79	87	62	85	
LOC104916534	83	86	67	100	82	85	pre-mRNA cleavage complex 2 protein Pcf11 pseudogene
VWCE	101	90	81	55	45	85	von Willebrand factor C and EGF domains
ARHGAP28	98	67	109	70	83	85	Rho GTPase activating protein 28
CTNND2	76	67	76	56	65	85	catenin (cadherin-associated protein), delta 1
FAXDC2	75	61	59	56	65	85	failed axon connections homolog (Drosophila)
MFI2							antigen p97 (melanoma associated) identified by monoclonal antibodies
	90	89	96	79	94	85	133.2 and 96.5
LOC100540211	80	80	93	102	75	85	amine oxidase [flavin-containing] B-like
PTPN7	108	84	129	89	98	85	protein tyrosine phosphatase, non-receptor type 7
MPZL1	95	69	91	70	74	85	myelin protein zero-like 1
LOC100545386	104	93	113	109	108	85	dedicator of cytokinesis protein 1-like
LOC104914177	75	66	80	65	73	85	uncharacterized LOC104914177
CCDC79	160	109	127	109	163	85	coiled-coil domain containing 78
LOC104911789	104	81	92	88	89	85	uncharacterized LOC104911789
VWF	119	165	108	164	184	85	von Willebrand factor
LOC100538449	79	81	85	78	62	85	liprin-alpha-4-like
LOC104912557	116	76	107	87	98	85	ataxin-10-like
LOC104914838	47	67	65	84	44	85	ran-binding protein 3-like
NXP2	55	58	61	48	28	85	neurexophilin 2
LOC100539703	92	83	104	76	71	85	NAD(P)(+)-arginine ADP-ribosyltransferase 2-like
DOK1	133	103	115	81	102	85	deoxyhypusine hydroxylase/monooxygenase
CEMP1	141	92	111	156	162	85	cadherin, EGF LAG seven-pass G-type receptor 3
ZNF366	89	95	121	131	83	84	zinc finger protein 366
EBF3	99	86	78	71	76	84	early B-cell factor 2
LOC104913060	84	82	84	93	86	84	NEDD4-like E3 ubiquitin-protein ligase WWP2
MC4R	82	64	93	73	86	84	melanocortin 4 receptor
LOC100541177	114	135	164	74	90	84	keratin, type I cytoskeletal 13-like
CNTN3	79	51	82	49	37	84	contactin 2 (axonal)
BTk	88	64	96	68	101	84	B-cell translocation gene 4
LOC100545800	104	85	97	61	83	84	cytochrome c oxidase assembly factor 7
LOC104910759	71	72	80	64	94	84	myotubularin-related protein 7-like
KBTBD13	85	109	75	79	97	84	kelch repeat and BTB (POZ) domain containing 12
TMEM140	108	137	100	159	116	84	transmembrane protein 140
LOC104917205	94	61	77	61	68	84	reticulon-3-like
TSPO2	152	37	105	82	127	84	translocator protein 2
LIM2	80	85	75	65	82	84	ligase IV, DNA, ATP-dependent
LOC100547242	114	86	88	83	98	84	S-methyl-5'-thioadenosine phosphorylase-like
LOC100550121	104	86	106	95	92	84	E3 ubiquitin-protein ligase HERC2
INSL5	117	119	115	122	91	84	insulin induced gene 2
LOC104909876	101	77	93	80	85	84	activating signal cointegrator 1 complex subunit 3-like
LOC104916153	96	94	84	98	81	84	methyltransferase-like protein 16
LSAMP	94	97	91	118	79	84	limbic system-associated membrane protein
LOC100547145	82	65	87	59	56	84	transmembrane protein 17B-like
LOC104912696	103	64	91	80	81	84	uncharacterized LOC104912696
GRIN2A	56	96	45	64	9	83	glutamate receptor, ionotropic, N-methyl D-aspartate 1
LOC100547427	112	78	112	83	115	83	protein FAM13C-like
LOC100541852	99	76	78	82	74	83	AT-rich interactive domain-containing protein 1A
LOC104917392	88	74	86	69	82	83	zinc finger protein 572-like
RNF198	109	98	105	89	84	83	ring finger protein 198
SMAD6	73	82	85	57	86	83	SMAD family member 6
LOC104915499	78	64	56	54	64	83	uncharacterized LOC104915499
HENMT1	112	82	122	72	100	83	HemK methyltransferase family member 1
CADPS	65	82	76	89	73	83	cell adhesion molecule 1
LOC104912093	92	103	87	76	78	83	uncharacterized LOC104912093
FBXL15	81	76	87	93	102	83	F-box and leucine-rich repeat protein 14
SFR1	113	74	96	71	79	83	SWI5-dependent recombination repair 1
LOC104915781	139	105	126	102	117	83	all-trans-retinol 13,14-reductase-like
HYKK	96	74	80	85	102	83	hydroxypyruvate isomerase (putative)
LOC100544920	62	58	65	75	83	83	rho guanine nucleotide exchange factor 4
UBE2E2	90	78	99	77	97	83	ubiquitin-conjugating enzyme E2E 2
PLLP	48	55	71	81	53	83	plasmolipin
ENKUR	47	62	39	44	47	83	enkurin domain containing 1
MSMP	98	103	84	78	66	83	microseminoprotein, prostate associated
RHOC	113	113	94	100	114	83	ras homolog family member C
LOC100543953	148	65	85	199	76	83	uncharacterized LOC100543947
PPM1J	100	68	83	74	99	83	protein phosphatase, Mg2+/Mn2+ dependent, 1J
LOC104910782	98	72	92	70	88	83	uncharacterized LOC104910782
LOC104916527	104	107	92	86	91	83	zinc finger and BTB domain-containing protein 9-like
MAD11L	110	66	110	77	86	83	MAD1 mitotic arrest deficient-like 1 (yeast)

CACNA1G							
	83	64	106	54	42	83	calcium channel, voltage-dependent, R type, alpha 1E subunit
LOC104910393	105	80	99	95	68	83	matrix metalloproteinase-16-like
LOC104916896	81	82	76	72	76	83	uncharacterized LOC104916896
LOC104916709	76	102	67	82	71	83	uncharacterized LOC104916709
CSH14orf79	37	40	35	58	36	83	chromosome 5 open reading frame, human C14orf39
NT5DC1	87	68	97	96	106	83	5'-nucleotidase domain containing 1
LOC100544818	118	98	104	74	67	83	scavenger receptor cysteine-rich type 1 protein M130-like
LOC104914454	138	92	97	92	86	83	importin-9-like
LOC104915202	95	67	99	67	60	83	DNA polymerase alpha catalytic subunit-like
NODAL	6	14	3	4	11	83	nodal growth differentiation factor
RGS14	108	97	101	113	119	83	regulator of G-protein signaling 14
SLC26A1	84	80	83	74	61	83	solute carrier family 26 (anion exchanger), member 1
LOC104913357	83	79	89	95	79	82	CREB-binding protein-like
RAD54L	99	71	95	62	75	82	RAD54-like (S. cerevisiae)
TTL1	112	78	140	92	130	82	tubulin tyrosine ligase-like family, member 1
LOC104914946	115	65	117	69	109	82	BEN domain-containing protein 2-like
LOC104915317	80	56	86	63	55	82	intraflagellar transport protein 74 homolog
CST7	86	67	71	72	68	82	cysteine and glycine-rich protein 3 (cardiac LIM protein)
LOC100543818	96	68	91	89	74	82	uncharacterized LOC100543796
LOC104913084	109	77	87	77	76	82	protein CBFA2T3
LOC100547415	83	77	86	87	80	82	hemoglobin subunit beta-like
GPR64	51	136	59	92	52	82	G protein-coupled receptor 63
ZDHC21	99	72	101	83	84	82	zinc finger, DHC-type containing 21
PPP1R1C	99	110	101	77	69	82	protein phosphatase 1, regulatory (inhibitor) subunit 1C
LOC104911155	92	109	104	90	87	82	uncharacterized LOC104911155
LY96	67	55	77	97	113	82	lymphocyte antigen 96
LOC100543930	61	77	68	60	50	82	carboxypeptidase A6
LOC100550074							
	104	82	107	76	75	82	maestro heat-like repeat-containing protein family member 1
LOC100550208	97	74	119	77	81	82	protein tweety homolog 3-like
CCDC113	77	68	78	65	59	82	coiled-coil domain containing 112
LRRC30	49	102	60	75	74	82	leucine rich repeat containing 30
B3GALT1							
	90	186	74	66	76	82	UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 1
LOC104910852	87	66	98	76	86	82	uncharacterized LOC104910852
LOC104909554	68	78	71	82	70	82	tau-tubulin kinase 1
DMC1	74	103	104	101	151	82	diencephalon/mesencephalon homeobox 1
LOC100541738							
	68	58	69	49	59	82	leucine-rich repeats and immunoglobulin-like domains protein 3
LOC104912741	92	73	115	104	95	82	uncharacterized LOC104912741
IRF7	106	90	99	105	105	82	interferon regulatory factor 6
OTOR	51	73	53	50	60	82	otoraplin
RIC3	80	67	87	74	74	82	RIC3 acetylcholine receptor chaperone
ITIH2	47	51	47	38	55	82	integrin, beta 8
LOC100548792							
	107	86	199	78	71	82	pyruvate dehydrogenase (acetyl-transferring) kinase isozyme 3, mitochondrial-like
ASTN2	107	88	79	84	93	82	astrotactin 2
STK35	118	91	102	88	96	82	serine/threonine kinase 35
SLC35F2	88	71	65	46	36	81	solute carrier family 35, member F2
LOC104909597	95	43	76	70	116	81	uncharacterized LOC104909597
LOC100549275	81	63	96	78	77	81	pancreatic lipase-related protein 2-like
NAB2	142	96	115	89	114	81	NGFI-A binding protein 2 (EGR1 binding protein 2)
P2RY13	91	62	65	84	79	81	purinergic receptor P2Y, G-protein coupled, 13
LOC100547097	99	82	104	95	90	81	enteropeptidase-like
LOC104911414	79	68	92	81	77	81	coiled-coil domain-containing protein 132-like
IGSF6	71	62	72	76	72	81	immunoglobulin superfamily, member 5
LOC104909564	133	90	106	97	96	81	son of sevenless homolog 1-like
DSEL	89	86	94	77	70	81	dermatan sulfate epimerase
LOC100546153	89	106	67	119	87	81	uncharacterized LOC100546146
GSTA1.1	102	121	72	60	49	81	glutathione synthetase
F8							
	150	138	151	138	167	81	coagulation factor VII (serum prothrombin conversion accelerator)
LOC104917418	62	68	65	71	67	81	DNA repair protein complementing XP-G cells-like
LOC104910445	102	70	84	56	66	81	uncharacterized LOC104910445
FAM169B	111	81	118	88	110	81	family with sequence similarity 169, member A
LOC100540834							
	69	102	83	143	104	81	solute carrier organic anion transporter family member 1C1-like
LOC104913229	106	74	96	112	87	81	ankyrin repeat and KH domain-containing protein 1-like
LOC104911458	90	75	89	77	74	81	PHD finger protein 14-like
SEMA6C							
	94	88	83	89	92	81	sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6C
PROSER2	102	117	84	92	69	81	proline and serine rich 2
LOC104916101	99	56	81	63	65	81	uncharacterized LOC104916101
AGTRAP	119	77	85	67	77	80	angiotensin II receptor-associated protein
GATA2	107	82	98	82	94	80	growth arrest-specific 8
PLAGL1	124	86	102	83	85	80	pleiomorphic adenoma gene-like 1
LOC104909788	41	45	46	75	77	80	eyes absent homolog 4-like
LRRC23	86	95	98	81	89	80	leucine rich repeat containing 23

LOC100546989	68	130	61	113	92	80	SET-binding protein 1
FOXP2	67	78	72	83	53	80	forkhead box P1
C1QTNF5	96	109	120	101	146	80	C1q and tumor necrosis factor related protein 4
IL17RA	92	58	81	72	91	80	interleukin 17C
KIAA0040	135	99	121	107	109	80	ketohexokinase (fructokinase)
PANX2	83	67	63	61	64	80	pannexin 2
FST	71	78	57	72	36	80	follicle stimulating hormone, beta polypeptide
HOMER1	135	76	114	74	99	80	4-hydroxy-2-oxoglutarate aldolase 1
LOC100539100	65	67	87	58	66	80	prostatic acid phosphatase-like
LOC104913658	97	67	108	65	84	80	ectonucleoside triphosphate diphosphohydrolase 2-like
LOC100547387	84	69	88	67	68	80	uncharacterized LOC100547383
ANKRD9	54	73	52	116	122	80	ankyrin repeat domain 9
OSBPL3	125	88	102	84	91	80	oxysterol binding protein-like 3
C12H15orf48	115	73	74	145	132	80	chromosome 12 open reading frame, human C15orf43
COL7A1	120	97	72	87	80	80	collagen, type VI, alpha 6
LOC104909671	89	64	97	94	83	80	interferon-induced, double-stranded RNA-activated protein kinase-like
LOC100540803	71	65	94	62	100	80	phosphatidylinositol 3,4,5-trisphosphate 5-phosphatase 2-like
LOC104910850	77	55	82	60	54	80	DNA excision repair protein ERCC-6-like 2
NMNAT3	52	83	57	81	46	80	nicotinamide nucleotide adenylyltransferase 3
MAST3	106	90	112	96	102	80	microtubule associated serine/threonine kinase 3
NPNT	62	85	92	70	84	80	nephronectin
TMEM173	65	80	69	96	100	80	transmembrane protein 173
LOC104913192	63	71	63	69	54	80	uncharacterized LOC104913192
LOC104916023	96	94	93	84	84	80	zinc finger protein 853-like
LOC104913933	64	54	51	79	57	80	uncharacterized LOC104913933
LOC100545423	82	61	89	63	74	79	acyl-coenzyme A thioesterase 5-like
LOC104912730	100	125	102	122	124	79	von Willebrand factor-like
LOC100538867	87	58	102	71	68	79	WAP four-disulfide core domain protein 2-like
LOC104916716	80	61	86	77	96	79	arf-GAP with Rho-GAP domain, ANK repeat and PH domain-containing protein 1-like
LOC104909978	82	59	76	72	101	79	phosphatidate phosphatase LPIN1-like
NUDT8	92	74	75	61	75	79	nudix (nucleoside diphosphate linked moiety X)-type motif 8
SS18L1	68	55	68	79	74	79	synovial sarcoma translocation gene on chromosome 18-like 1
LOC104917520	86	95	97	92	68	79	TSC22 domain family protein 3 pseudogene
LOC100541737	100	77	94	79	84	79	heme-binding protein 2-like
LOC104912761	108	96	109	98	98	79	protein PML-like
ANKRD29	66	76	67	79	55	79	ankyrin repeat domain 29
SCNN1G	67	70	72	87	61	79	sodium channel, non-voltage-gated 1, gamma subunit
FAM167B	40	89	52	67	50	79	family with sequence similarity 167, member A
LOC104915050	59	48	90	70	57	79	uncharacterized LOC104915050
STX17	112	67	94	76	92	79	syntaxin 17
LOC104909683	49	79	45	100	67	79	uncharacterized LOC104909683
KLHL23	64	112	76	139	109	79	kelch-like family member 22
TGDS	90	74	90	78	80	79	TDP-glucose 4,6-dehydratase
LOC104910195	68	56	50	42	101	79	uncharacterized LOC104910195
LOC104912551	100	84	97	89	83	79	ras GTPase-activating protein 2-like
LOC104915069	70	51	61	63	64	79	transmembrane protein 2-like
GIN1	72	65	89	69	67	79	GIMAP family P-loop NTPase domain containing 1
LOC100546652	102	78	97	77	66	79	photoreceptor outer segment membrane glycoprotein 2
LOC104911470	110	73	88	63	74	79	RUN domain-containing protein 3B-like
LOC100550755	112	177	115	84	64	79	probable G-protein coupled receptor 83
LOC104916246	64	76	81	74	73	79	dehydrogenase/reductase SDR family member on chromosome X-like
LOC104909804	51	78	52	68	76	79	uncharacterized LOC104909804
NACC1	98	75	81	66	78	79	nucleus accumbens associated 1, BEN and BTB (POZ) domain containing
LOC100542849	74	56	85	74	75	79	ras-like GTP-binding protein rhoA
C8G	52	92	51	64	48	79	complement component 8, beta polypeptide
POLR3D	97	87	85	78	98	79	polymerase (RNA) III (DNA directed) polypeptide D, 44kDa
CNNM1	116	72	95	63	120	78	calponin 3, acidic
RSPH3	68	69	66	83	54	78	radial spoke 3 homolog (Chlamydomonas)
LOC100544433	82	87	94	98	75	78	zinc finger protein 383-like
NXP3	108	72	86	62	70	78	neurexophilin 3
LOC104915080	65	74	75	61	59	78	uncharacterized LOC104915080
TIMP4	83	202	120	205	120	78	TIMP metalloproteinase inhibitor 4
TMTC2	82	67	75	77	85	78	transmembrane and tetratricopeptide repeat containing 2
LRRC61	101	128	103	96	96	78	leucine rich repeat containing 61
LOC100542164	116	75	101	77	82	78	serine/arginine-rich splicing factor 7-like
PEBP4	52	112	60	127	61	78	phosphatidylethanolamine-binding protein 4
LOC100540289	68	52	69	49	95	78	polymeric immunoglobulin receptor-like
LOC104913890	72	62	85	75	71	78	general transcription factor II-I-like
LOC104916958	51	59	86	70	67	78	class E basic helix-loop-helix protein 40-like
LIHK1	89	101	86	93	96	78	Lck interacting transmembrane adaptor 1
LOC104909337	76	72	62	46	79	78	complement C4-like

LOC104914903	61	83	63	62	46	78	uncharacterized LOC104914903
FAXC							Finkel-Biskis-Reilly murine sarcoma virus (FBR-MuSV) ubiquitously expressed
HECW1	109	70	100	68	76	78	
HTR7	118	67	126	71	97	78	HECT domain containing E3 ubiquitin protein ligase 4
	90	63	88	65	73	78	5-hydroxytryptamine (serotonin) receptor 6, G protein-coupled
KIAA1644	97	53	92	42	106	78	KIAA1551 ortholog
LOC104912728	50	87	53	63	62	78	uncharacterized LOC104912728
LOC104915071	74	69	88	84	78	78	transmembrane protein 2-like
LOC104917612	86	87	119	89	92	77	cytoplasmic dynein 2 heavy chain 1-like
STK32C	63	60	59	59	49	77	serine/threonine kinase 32C
LOC104914049	104	67	120	81	90	77	uncharacterized LOC104914049
LOC104912526	81	65	99	67	65	77	uncharacterized LOC104912526
LOC100549755	73	54	78	62	59	77	carbohydrate sulfotransferase 6-like
LOC104915024	68	62	69	77	77	77	FRAS1-related extracellular matrix protein 1-like
LOC104910786	113	85	93	67	80	77	suppressor of cytokine signaling 1-like
HOGA1							heterogeneous nuclear ribonucleoprotein U (scaffold attachment factor A)
LOC100539194	156	165	136	122	109	77	periostin
VTCN1	34	64	119	28	47	77	V-set domain containing T cell activation inhibitor 1
LOC100538525	42	62	48	54	57	77	tetraspanin-15-like
LOC104913819	61	80	64	82	62	77	nucleoside diphosphate kinase
LOC104914112	44	73	67	95	141	77	uncharacterized LOC104914112
FAM149A	103	85	98	74	94	77	family with sequence similarity 13, member A
LOC100541400	50	76	71	122	86	77	thyroid hormone-inducible hepatic protein-like
LOC104909271	72	110	60	65	59	77	1,4-alpha-glucan-branching enzyme-like
LOC100547338	45	54	46	64	54	77	protein unc-13 homolog C-like
XKR8	77	65	88	85	72	77	
	123	75	95	66	82	77	XK, Kell blood group complex subunit-related family, member 8
LOC104912823							
	73	64	74	71	57	77	S phase cyclin A-associated protein in the endoplasmic reticulum-like
LOC104911603	85	47	91	83	73	77	insulin-like growth factor I
LOC104913026	119	70	91	90	73	77	enhancer of mRNA-decapping protein 4-like
RTN1	113	110	110	105	98	77	reticulon 1
HOXB3	95	67	110	65	78	77	homeobox B2
LRRC52	82	78	90	72	77	77	leucine rich repeat containing 52
ELAVL4	68	72	67	61	74	77	ELAV like neuron-specific RNA binding protein 2
LOC100547877	76	71	68	57	53	77	polypeptide N-acetylgalactosaminyltransferase 12-like
DGKG	90	124	101	72	83	77	diacylglycerol kinase, epsilon 64kDa
LOC104910625	83	87	83	72	71	77	uncharacterized LOC104910625
NRCAM	53	97	81	54	64	77	neuronal cell adhesion molecule
TMEM116	70	101	62	89	62	77	transmembrane protein 116
ADRA1D	79	69	70	83	99	77	adrenoceptor alpha 1D
LOC100541562							amyloid beta A4 precursor protein-binding family B member 1-
	73	66	81	54	62	77	interacting protein
PATZ1	86	71	82	71	53	76	POZ (BTB) and AT hook containing zinc finger 1
XPNPPEP2							
	62	83	58	65	65	76	X-prolyl aminopeptidase (aminopeptidase P) 2, membrane-bound
LOC104910189	88	87	79	83	53	76	uncharacterized LOC104910189
LOC104913064	69	74	79	71	68	76	acyl-CoA synthetase family member 3
LOC100540786	63	99	63	100	76	76	claw keratin-like
LOC100539289	76	58	85	88	100	76	DDB1- and CUL4-associated factor 6-like
STMN2	57	124	44	68	64	76	stathmin 2
LOC104917580	87	56	91	90	77	76	sister chromatid cohesion protein PDS5 homolog B-like
LOC100544286	78	65	66	72	68	76	follicle-stimulating hormone receptor-like
CORO7	80	68	79	68	69	76	coronin 6
AQP11	72	92	69	76	89	76	aquaporin 11
FZD3	83	95	84	98	62	76	frizzled class receptor 10
LOC104916338	124	92	95	80	100	76	protein Smaug homolog 2-like
TAL1	121	70	70	90	110	76	T-cell acute lymphocytic leukemia 1
LOC100546071	76	91	87	99	55	76	protein SCARECROW 1-like
LOC104913414	122	67	109	74	94	76	ubiquitin carboxyl-terminal hydrolase 22-A-like
SYCP1	67	66	63	59	53	76	synaptonemal complex protein 1
LOC100539971	75	65	74	87	58	76	protein LAP2-like
CZH5orf63	80	84	77	75	65	76	chromosome Z open reading frame, human C5orf51
DNAAF1	122	87	137	79	108	76	DNA replication helicase/nuclease 2
LOC104909988	75	64	79	83	72	76	kinase D-interacting substrate of 220 kDa-like
LOC100544592	92	70	107	62	55	76	receptor-type tyrosine-protein phosphatase O-like
MYL10	138	258	182	137	82	76	myosin, light chain 10, regulatory
HELZ2	115	76	110	93	110	76	helicase with zinc finger
LOC104914814	93	78	102	66	64	76	rho guanine nucleotide exchange factor 39-like
LOC104914972	71	68	81	80	66	76	collagen type IV alpha-3-binding protein
METTL17	78	53	45	37	44	76	methyltransferase like 17
FCHSD1	114	87	74	65	81	76	FCH domain only 2
LOC100545464	92	75	78	90	65	76	histone H4-like
LOC100550586	87	46	87	64	77	75	tyrosine-protein kinase Sgk223-like
MAVS	66	73	68	80	66	75	mitochondrial antiviral signaling protein
LOC104914602	86	79	87	97	95	75	protein AF-17-like

LOC100541121							
LACTBL1	116	99	87	89	159	75	tyrosine-protein phosphatase non-receptor type substrate 1-like
MB	135	149	100	126	141	75	lactamase, beta 2
LOC100545225	59	96	68	74	91	75	myoglobin
S100A13	56	86	78	72	68	75	E3 ubiquitin-protein ligase RNF220-like
IL1RAPL2	105	96	122	85	86	75	S100 calcium binding protein A13
LOC104914463	66	56	68	58	42	75	interleukin 1 receptor accessory protein-like 1
LOC100539157	69	54	66	70	72	75	uncharacterized LOC104914463
IMPG2	117	70	129	67	94	74	fibronectin type-III domain-containing protein 3a-like
LOC100546792	49	81	83	83	54	74	interphotoreceptor matrix proteoglycan 1
MT2A	82	65	74	70	88	74	synaptotagmin-like 3
LOC100545943	45	63	39	95	57	74	uncharacterized MT2A
CLCA2	87	62	87	75	69	74	dystrobrevin alpha
LOC104913318	52	71	54	60	60	74	cytoplasmic linker associated protein 2
LOC100549340	112	70	88	61	90	74	uncharacterized LOC104913318
LOC104917158	89	68	85	79	78	74	uncharacterized LOC100549337
LOC100539239	122	67	90	83	99	74	serine/threonine-protein kinase MARK2-like
ALOX5	102	91	84	91	107	74	AF4/FMR2 family member 3-like
LYVE1	44	73	72	62	58	74	arachidonate 5-lipoxygenase
RBKS	72	101	107	83	88	74	lymphatic vessel endothelial hyaluronan receptor 1
LOC104915122	102	54	98	56	85	74	ribokinase
LOC104912866	85	70	84	100	67	74	protein patched homolog 1-like
LCOR	83	92	73	78	82	74	uncharacterized LOC104912866
PIGG	78	81	78	89	78	74	leucine carboxyl methyltransferase 2
KIF5C	75	64	78	72	57	74	phosphatidylinositol glycan anchor biosynthesis, class G
LOC104915967	85	67	76	60	54	74	kinesin family member 4A
LOC104909635	100	78	89	62	71	74	transmembrane protein 198-like
LOC104915412							
LOC104914770	110	79	109	91	92	74	latent-transforming growth factor beta-binding protein 1-like
LOC104910827	66	86	71	99	82	74	uncharacterized LOC104915412
	83	81	100	77	58	74	uncharacterized LOC104914770
	88	71	75	71	76	74	serine/threonine-protein phosphatase 2A 55 kDa regulatory subunit B
MCF2L2	97	86	133	103	82	74	gamma isoform-like
LOC100546369	87	84	84	94	85	74	MCF.2 cell line derived transforming sequence-like 2
LRFN5							calsyntenin-2
	114	73	95	79	72	74	leucine rich repeat and fibronectin type III domain containing 5
LOC104915788	64	64	72	72	64	74	protein phosphatase 1 regulatory subunit 37-like
LOC104913142	55	85	80	95	62	74	protein BTG1-like
LOC104916022	57	56	48	40	53	74	uncharacterized LOC104916022
LOC104917559	231	72	165	58	71	74	serine/threonine-protein kinase DCLK1-like
PYGO1	87	81	97	114	71	74	pygopus family PHD finger 1
LOC100542367	60	54	54	57	41	73	DNA polymerase zeta catalytic subunit
KLHDC8A	71	120	78	80	73	73	kelch domain containing 7A
LOC104913909	75	68	68	58	58	73	uncharacterized LOC104913909
URGCP	88	66	86	56	75	73	upregulator of cell proliferation
LOC104916770	66	80	51	89	56	73	serine/arginine-rich splicing factor 6 pseudogene
SEMA4G							
	94	77	74	77	86	73	sema domain, immunoglobulin domain (Ig), transmembrane domain
LOC104911688	83	89	83	85	88	73	(TM) and short cytoplasmic domain, (semaphorin) 4G
XCR1	84	82	85	73	65	73	uncharacterized LOC104911688
COL13A1	56	76	97	44	43	73	chemokine (C motif) receptor 1
LOC104917546	96	71	83	78	78	73	collagen, type X, alpha 1
DHRS13	86	64	92	64	97	73	uncharacterized LOC104917546
APBA2							dehydrogenase/reductase (SDR family) member 12
	106	75	94	61	66	73	amyloid beta (A4) precursor protein-binding, family A, member 2
PTGFR	68	72	81	79	78	73	prostaglandin F receptor (FP)
POLR3C							
	100	67	97	73	103	73	polymerase (RNA) III (DNA directed) polypeptide C (62kD)
FERMT1	98	76	87	88	98	73	Fer3-like bHLH transcription factor
LSMEM2	47	77	53	81	55	73	leucine-rich single-pass membrane protein 2
ADRA2B	76	83	61	83	67	73	adrenoceptor alpha 2B
ENGASE	117	74	100	54	59	73	endoglin
LOC104910314	177	219	123	105	87	73	uncharacterized LOC104910314
SDCCAG3	78	64	72	63	64	73	serologically defined colon cancer antigen 3
LOC104917305	6	117	2	131	3	73	myelin-oligodendrocyte glycoprotein-like
LOC104909399	73	65	75	69	73	73	probable asparagine--tRNA ligase, mitochondrial
LOC104915000	65	55	63	77	70	73	uncharacterized LOC104915000
LOC104910199	46	67	43	74	47	73	dynein heavy chain 5, axonemal-like
KLHL10	89	61	85	57	66	73	kelch domain containing 8B
LOC104912440	101	65	93	71	80	73	single-stranded DNA-binding protein 3-like
TMEM150C	90	61	68	70	90	72	transmembrane protein 150C
LOC100549479	94	81	85	76	91	72	isopentenyl-diphosphate Delta-isomerase 1-like
SPRY4	70	43	67	48	73	72	sprouty homolog 4 (Drosophila)
LOC100550217	103	70	105	73	101	72	versican core protein
LOC104911092	79	66	85	82	72	72	MAX gene-associated protein-like
TENM2	73	83	103	77	53	72	teneurin transmembrane protein 2
LOC104917112	111	60	94	66	83	72	chromodomain-helicase-DNA-binding protein 8-like

AKAP5	190	51	176	66	114	72	A kinase (PKA) anchor protein 5
SLC35E4	87	83	80	76	106	72	solute carrier family 35, member E4
LOC104915487	83	68	84	72	65	72	semaphorin-4C-like
LOC100551131	96	74	87	86	80	72	receptor-type tyrosine-protein phosphatase alpha-like
LOC104913223	96	70	86	94	64	72	ankyrin repeat and KH domain-containing protein 1-like
IQCH	92	67	78	53	64	72	IQ motif containing G
LOC104910767	85	49	88	61	51	72	uncharacterized LOC104910767
CSF3R	96	61	88	61	101	72	colony stimulating factor 3 (granulocyte)
LOC104915264	97	74	104	56	106	72	uncharacterized LOC104915264
LOC104912158	24	59	32	70	52	72	uncharacterized LOC104912158
LOC104912473	75	57	77	52	56	72	uncharacterized protein C1orf228 homolog
LOC100541789	81	73	69	60	73	72	hypermethylated in cancer 1 protein-like
RD3	57	56	69	59	77	72	retinal degeneration 3
RAB7B	74	71	53	56	61	72	RAB7B, member RAS oncogene family
LOC100545133							
	120	57	95	95	88	72	ras-related and estrogen-regulated growth inhibitor-like protein
LOC104916791	110	75	69	72	97	72	uncharacterized LOC104916791
LOC104910872	78	50	77	57	65	72	probable tRNA (uracil-O(2)-)-methyltransferase
RHAG	134	40	89	91	221	72	Rh-associated glycoprotein
LOC100543419	85	176	105	138	99	72	sodium/hydrogen exchanger 9
LOC104911683	66	88	70	91	101	72	non-homologous end-joining factor 1-like
LOC104914666							
	95	115	76	164	92	72	MAP kinase-interacting serine/threonine-protein kinase 2-like
LOC104911862	108	55	85	65	88	72	uncharacterized LOC104911862
LOC104915978	81	76	71	63	57	71	uncharacterized LOC104915978
PPP1R3B	95	96	70	85	98	71	protein phosphatase 1, regulatory subunit 3B
C9H8orf48	166	98	165	78	133	71	chromosome 8 open reading frame, human C10orf90
LOC100543749	68	157	148	172	125	71	scale keratin-like
LOC100545666	81	68	81	56	70	71	calsyntenin-1-like
LOC104913537	82	51	96	59	80	71	uncharacterized LOC104913537
DHX34	73	54	80	67	75	71	DEAH (Asp-Glu-Ala-His) box polypeptide 33
DOPEY2	67	79	101	99	80	71	dopey family member 1
PAQR5	61	96	84	122	90	71	progesterone and adipoQ receptor family member V
IFFO2	88	71	83	66	61	71	intermediate filament family orphan 1
LOC100544929	175	81	130	585	157	71	leukotriene B4 receptor 1-like
VWASB2	55	74	60	56	59	71	von Willebrand factor A domain containing SB2
CRYGN	92	78	83	67	80	71	beta-gamma crystallin domain containing 3
LOC100543316	58	55	70	52	47	71	feather keratin 1-like
LOC104911845	91	62	74	53	58	71	DNA annealing helicase and endonuclease ZRANB3-like
GN2	82	61	83	55	80	71	guanine nucleotide binding protein (G protein), gamma 13
LOC100545757	85	109	109	106	95	71	ATP-binding cassette sub-family A member 10
HUNK	68	60	58	71	65	71	HtrA serine peptidase 3
LOC104916210	63	63	74	58	62	71	glucosylceramidase-like
LOC100550389	95	77	83	63	86	71	general transcription factor IIE subunit 1-like
PLXNA4	60	49	46	69	76	71	plexin A4
LOC104917409	80	81	85	92	68	71	uncharacterized LOC104917409
LOC104911425	155	145	132	87	126	71	uncharacterized LOC104911425
CDC42EP2	83	66	66	61	55	70	CDC42 effector protein (Rho GTPase binding) 1
KCNK1							
	109	154	116	131	199	70	potassium inwardly-rectifying channel, subfamily J, member 8
MCPH1	101	64	98	65	63	70	microcephalin 1
DYNC2H1	58	66	77	76	64	70	dynein, cytoplasmic 1, light intermediate chain 1
ZNF574	89	71	81	91	81	70	zinc finger protein 574
LOC104916919	70	60	79	61	57	70	uncharacterized LOC104916919
MFNG							
	87	65	77	80	88	70	MFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase
LOC104916274							
	58	106	47	91	59	70	potassium voltage-gated channel subfamily A member 7-like
LOC104913517	83	62	80	66	83	70	integrin alpha-D-like
RANBP17	64	68	49	76	56	70	RAN binding protein 17
LOC100542634	65	47	69	68	50	70	acyl-coenzyme A thioesterase 1-like
KCNIP1							
	133	85	92	70	77	70	potassium voltage-gated channel, subfamily H (eag-related), member 8
LRRC7	82	72	71	70	60	70	leucine rich repeat containing 7
AGTPBP1	47	112	79	83	133	70	ATP/GTP binding protein 1
COL26A1	85	65	83	66	88	70	collagen, type XXV, alpha 1
PREX2							
	100	76	98	89	102	70	phosphatidylinositol-3,4,5-trisphosphate-dependent Rac exchange factor 2
LOC104909849	91	69	92	85	76	70	monocarboxylate transporter 10-like
LOC104910336	89	58	98	65	73	70	DNA repair-scaffolding protein-like
LOC104914002	75	66	81	75	67	70	uncharacterized LOC104914002
RFK	56	53	78	62	66	70	riboflavin kinase
LOC104917247	61	44	45	70	68	70	extensin-like
NINJ2	66	116	74	60	56	70	ninjurin 2
LOC104913943	57	44	63	80	69	70	nuclear receptor corepressor 1-like
LOC104916198	88	76	84	87	78	70	nuclear RNA export factor 1-like
ARX	88	107	80	71	54	70	aristaless related homeobox
KCNJ6							
	87	37	104	39	106	70	potassium inwardly-rectifying channel, subfamily J, member 5

LOC104910223	136	51	105	77	72	70	protein FAM65B-like
LOC104912138	74	65	61	61	81	70	caprin-2-like
LOC104914802	71	52	79	69	65	70	motile sperm domain-containing protein 2-like
CBX2	72	79	77	77	78	70	chromobox homolog 1
PTGER2	99	81	81	80	101	70	prostaglandin E receptor 2 (subtype EP2), 53kDa
LOC104912605	50	45	45	53	42	70	centrosomal protein of 63 kDa-like
LOC100550425	79	45	88	43	75	69	uncharacterized LOC100550425
DCTD	76	60	70	54	52	69	dopachrome tautomerase
L3MBTL1	53	65	62	58	56	69	L-3-hydroxyproline dehydratase (trans-)
LOC104912500	74	55	79	56	70	69	ras-related protein Rab-3A-like
LOC104911293	65	58	68	55	68	69	uncharacterized LOC104911293
LOC104913055	79	65	74	72	74	69	uncharacterized LOC104913055
TADA2B	98	71	89	74	74	69	transcriptional adaptor 2B
LOC104917532	66	46	68	62	62	69	uncharacterized LOC104917532
OSGIN2	86	71	63	71	48	69	oxidative stress induced growth inhibitor family member 2
ULK4	84	63	72	68	53	69	unc-51 like kinase 4
TNFAIP6	91	66	75	53	55	69	tumor necrosis factor, alpha-induced protein 6
LOC104909928	45	67	71	89	76	69	uncharacterized LOC104909928
PDE1A	65	53	67	63	47	69	phosphodiesterase 1A, calmodulin-dependent
LOC104916448	64	64	56	50	54	69	uncharacterized LOC104916448
SOCS2	137	74	126	68	110	69	suppressor of cytokine signaling 2
LOC104916481	66	54	65	61	85	69	frizzled-1-like
PYROXD2	75	100	86	91	56	69	pyridine nucleotide-disulphide oxidoreductase domain 2
LOC104912259	30	80	27	63	19	69	uncharacterized LOC104912259
SERGEF	75	48	74	56	58	69	secretion regulating guanine nucleotide exchange factor
LOC104913437	55	57	85	70	74	69	uncharacterized LOC104913437
PARP14	84	48	80	88	87	69	poly (ADP-ribose) polymerase family, member 14
LOC104910450	65	59	62	70	63	69	metastasis suppressor protein 1-like
TMEM74	73	69	77	46	77	69	transmembrane protein 74
LOC104913136	69	55	61	71	76	69	importin subunit alpha-5-like
SLC6A4							
LOC104912612	102	79	93	65	103	69	solute carrier family 6 (neurotransmitter transporter), member 4
	65	59	57	74	63	69	PERQ amino acid-rich with GVF domain-containing protein 2-like
LOC104911116	74	44	60	59	63	69	tetraspanin-18-like
LOC104914916	51	56	54	64	74	69	gamma-taxilin-like
FAM161B	68	63	59	68	58	69	family with sequence similarity 161, member A
HOXA2	64	59	67	47	55	69	homeobox A13
LOC104909445	87	77	86	70	64	69	C2 domain-containing protein 3-like
NCF1	77	57	66	70	75	69	neutrophil cytosolic factor 1
LOC104912015	92	65	79	79	67	69	ATP-dependent DNA helicase Q1-like
LOC104913300	72	67	70	65	47	69	uncharacterized LOC104913300
LOC104913101	91	102	89	76	80	69	MAP kinase-activated protein kinase 3-like
TCTE1	83	84	71	65	83	69	t-complex-associated-testis-expressed 1
SYTL2	56	46	66	64	46	69	synaptotagmin-like 2
LOC104912228	121	84	104	114	87	69	mastermind-like domain-containing protein 1
DLGAP3	98	92	75	69	64	69	discs, large (Drosophila) homolog-associated protein 2
LOC104910593	74	41	84	44	76	69	tyrosine-protein kinase Sgk223-like
LOC104917309	35	84	48	61	60	68	putative protein TPRXL
LOC104910859	86	70	74	62	84	68	G protein-coupled receptor kinase 4-like
PTGER4	67	63	66	72	63	68	prostaglandin E receptor 4 (subtype EP4)
BNC2	58	61	53	56	49	68	basoonucln 2
NECAB2	57	52	71	71	149	68	N-terminal EF-hand calcium binding protein 2
LOC104909502	21	44	7	61	7	68	uncharacterized LOC104909502
TNFRSF25	74	118	73	74	68	68	tumor necrosis factor receptor superfamily, member 25
LOC100543123	24	38	48	70	100	68	T-cell surface glycoprotein CD3 delta chain-like
RAB19	66	63	81	70	85	68	RAB19, member RAS oncogene family
ZDHC1	90	63	83	60	59	68	zinc finger, DHHC-type containing 1
LOC100544354	75	164	90	91	55	68	serine protease 23-like
KIF21A	89	64	87	73	103	68	kinesin family member 20A
LOC104909314	93	67	74	82	74	68	DENN domain-containing protein 1A-like
BEND6	95	85	90	82	80	68	BEN domain containing 6
TAGLN3	73	88	91	69	81	68	transgelin 3
TRIM25	88	65	91	73	81	68	tripartite motif containing 25
LOC104912760	73	56	65	57	50	68	nei like DNA glycosylase 1
LOC104913730	243	43	186	53	105	68	myosin heavy chain, cardiac muscle isoform
QTRT1	107	83	93	66	71	68	queuine tRNA-ribosyltransferase 1
SORL1							
	74	49	67	58	50	68	sortilin-related receptor, L(DLR class) A repeats containing
LOC100548556	42	73	42	96	44	68	pre-mRNA 3' end processing protein WDR33
LOC104912280	83	58	69	63	54	68	spindle assembly abnormal protein 6 homolog
TMEM79	59	65	66	56	63	68	transmembrane protein 79
LOC104911715	125	75	104	82	88	68	retinol dehydrogenase 7-like
TRAPP9	73	74	83	71	62	67	trafficking protein particle complex 9
HAVCR2	80	50	72	64	68	67	HAUS augmin-like complex, subunit 8
LOC100541644	79	72	66	81	91	67	betaine--homocysteine S-methyltransferase 1
MTNR1A	97	44	98	52	109	67	melatonin receptor 1A
LOC104911352	80	56	70	74	65	67	probable G-protein coupled receptor 158
LOC100545311	57	57	65	50	63	67	granzyme M-like

NCMAP	71	74	67	59	72	67	noncompact myelin associated protein
ZNF467	83	71	79	80	66	67	zinc finger protein 467
VSTM2L	40	67	61	78	62	67	V-set and transmembrane domain containing 2 like
ZDHC2	71	69	60	74	76	67	zinc finger, DHHC-type containing 2
LOC104913112	51	55	39	91	42	67	uncharacterized LOC104913112
LOC104910775	71	67	67	84	67	67	protein furry homolog-like
LOC104909440							
	73	79	65	55	59	67	cytochrome c oxidase assembly factor 4 homolog, mitochondrial
LOC100541858	76	66	79	62	85	67	alkylated DNA repair protein alkB homolog 8-like
LOC104917431	82	52	59	60	68	67	integral membrane protein GPR180-like
LOC104909782							
	65	59	71	63	60	67	mediator of RNA polymerase II transcription subunit 23-like
LOC104916500							single-strand selective monofunctional uracil-DNA glycosylase
	82	62	89	74	65	67	pseudogene
RPS6KA2	68	54	73	57	61	67	ribosomal protein S6 kinase, 90kDa, polypeptide 2
SLC23A1							
	68	72	72	59	58	67	solute carrier family 23 (ascorbic acid transporter), member 1
LOC104914048	57	55	60	57	53	67	protein kinase C-binding protein 1-like
LOC100542699	66	54	83	68	57	67	mitogen-activated protein kinase kinase kinase 3-like
LOC100544508	153	112	96	148	123	66	nuclear cap-binding protein subunit 2
LOC104911138	100	75	94	73	100	66	uncharacterized LOC104911138
RLBP1	128	88	108	51	53	66	retinaldehyde binding protein 1
LOC104914309	110	36	103	56	79	66	uncharacterized LOC104914309
WSCD2	41	38	49	42	37	66	WSC domain containing 2
LOC104911916	56	79	77	93	76	66	ankyrin-3-like
LOC104911015	87	64	74	65	73	66	receptor-type tyrosine-protein phosphatase eta-like
LOC100550268	76	59	85	74	61	66	uncharacterized LOC100550265
LOC104911571	53	38	65	66	82	66	thromboxane-A synthase-like
PIDD1	114	63	89	54	98	66	p53-induced death domain protein 1
LOC100549118	64	56	73	47	56	66	pancreatic triacylglycerol lipase-like
LOC100548109	102	67	94	66	84	66	1-acyl-sn-glycerol-3-phosphate acyltransferase alpha-like
LRTM2	92	81	66	76	85	66	leucine-rich repeats and transmembrane domains 2
CADPS2	68	67	80	80	56	66	Ca++-dependent secretion activator
NME5	76	58	74	59	89	66	NME/NM23 family member 5
ABCB9							
	68	71	72	80	119	66	ATP-binding cassette, sub-family B (MDR/TAP), member 9
ZDHC18	72	52	68	56	67	66	zinc finger, DHHC-type containing 18
RET	59	99	80	95	64	66	ret proto-oncogene
CTXN1	59	66	54	61	79	66	cytosolic thiouridylase subunit 2 homolog (S. pombe)
LOC100545925	64	67	50	61	52	66	RANBP2-like and GRIP domain containing 4
LOC104912103	96	72	81	110	66	66	sestrin-3-like
LOC100545856	72	67	59	77	57	66	galanin receptor type 1-like
LOC104913919	92	49	73	60	64	66	acetyl-CoA carboxylase-like
SLC17A6							
	83	42	68	58	75	66	solute carrier family 17 (vesicular glutamate transporter), member 6
LOC104911457	77	50	76	79	54	66	adseverin-like
VDR	71	71	49	55	51	66	vitamin D (1,25- dihydroxyvitamin D3) receptor
LOC104916187	77	72	59	57	66	66	uncharacterized LOC104916187
ZC4H2	92	62	88	72	81	66	zinc finger, C4H2 domain containing
BSN	56	55	55	41	39	66	basigin (Ok blood group)
SLC2A5							solute carrier family 2 (facilitated glucose/fructose transporter), member 5
	75	75	68	96	133	66	5
LOC104914769	67	54	73	80	65	66	ubiquitin-associated protein 2-like
LOC104913214	84	64	70	64	61	66	protocadherin beta-15-like
LOC104911129	110	75	93	71	82	66	estradiol 17-beta-dehydrogenase 12-like
LOC104914786	77	54	69	62	45	66	Fanconi anemia group G protein homolog
LOC104912430	52	69	58	57	53	66	E3 ubiquitin-protein ligase RNF170-like
LRRC4B	77	60	73	65	55	66	leucine rich repeat containing 4B
LOC100544062	54	91	71	79	65	66	feather keratin 2-like
SLC11A1							solute carrier family 11 (proton-coupled divalent metal ion transporter), member 1
	65	54	64	63	103	66	receptor-type tyrosine-protein phosphatase F-like
LOC100551284	99	72	97	80	91	66	uncharacterized LOC104916515
LOC104916515	65	70	72	56	61	66	family with sequence similarity 155, member A
FAM155B	89	89	77	83	53	66	uncharacterized LOC104913256
LOC104913256	88	82	97	64	61	66	crystallin, beta A4
CRYBB1	43	56	59	54	40	65	uncharacterized LOC100550814
LOC100550814	56	43	51	51	76	65	laminin, gamma 1 (formerly LAMB2)
LAMC2	56	60	51	80	78	65	achaete-scute family bHLH transcription factor 3
ASCL3	66	57	50	61	50	65	tyrosine-protein phosphatase non-receptor type 4-like
LOC104911808	84	62	74	76	69	65	stonin 1
STON1	60	67	81	84	59	65	uncharacterized LOC104909847
LOC104909847	95	50	70	75	79	65	histone H1.11R
LOC104915397	32	48	27	46	34	65	serine/threonine-protein kinase LMTK1-like
LOC100550358	65	121	68	106	70	65	uncharacterized LOC104911871
LOC104911871	64	112	66	95	56	65	ovo-like zinc finger 2
OVOL2	90	77	57	55	75	65	uncharacterized LOC104915009
LOC104915009	118	80	9	111	125	65	ankyrin repeat domain 13B
ANKRD13B	98	81	74	80	81	65	serine-protein kinase ATM-like
LOC104917618	59	46	67	58	53	65	

UBTD1	115	97	101	62	49	65	ubiquitin domain containing 1
LOC100544702	46	61	57	42	49	65	histone H3.3-like
ABCA12	76	67	58	77	36	65	ATP-binding cassette, sub-family A (ABC1), member 12
LOC100547765	85	82	80	69	74	65	aquaporin-7-like
IL16	56	70	95	71	69	65	interleukin 15
GRIP1	95	82	78	57	60	65	glutamate receptor, ionotropic, N-methyl-D-aspartate 3A
PEX11A	76	70	78	69	83	65	peroxisomal biogenesis factor 11 alpha
LOC104913325	30	47	44	45	47	65	uncharacterized LOC104913325
ANKRD33B	41	55	49	62	52	65	ankyrin repeat domain 33B
DACT2	86	106	51	65	94	65	dishevelled-binding antagonist of beta-catenin 1
LOC104916521	86	57	63	50	65	65	E3 ubiquitin-protein ligase TRIM39-like
CHRN82	82	80	62	64	61	64	cholinergic receptor, nicotinic, alpha 9 (neuronal)
LMOD1	74	96	62	78	92	64	LIM domain 7
LOC104915166	68	53	72	73	72	64	colorectal mutant cancer protein-like
LOC104915184							inositol hexakisphosphate and diphosphoinositol-pentakisphosphate
	49	42	58	51	45	64	kinase 2
FAM124B	73	66	77	66	82	64	family with sequence similarity 124A
LOC104912815	77	59	71	68	59	64	unconventional myosin-le-like
RIPPLY1	117	71	112	61	109	64	rippy transcriptional repressor 1
LOC104910208	40	55	43	73	45	64	dynein heavy chain 5, axonemal-like
LOC104911418	62	44	58	60	64	64	A-kinase anchor protein 9-like
RAB43	90	59	74	61	64	64	RAB43, member RAS oncogene family
PHLDA3	70	111	53	82	70	64	pleckstrin homology-like domain, family A, member 3
RASGEF1B	78	74	66	92	67	64	RasGEF domain family, member 1B
AK8	78	65	49	42	61	64	adenylate kinase 8
SYBU	76	60	66	47	55	64	syntabulin (syntaxin-interacting)
LOC104911082	64	83	58	64	52	64	ubiquitin-conjugating enzyme E2 L6
OPA3							optic atrophy 3 (autosomal recessive, with chorea and spastic paraplegia)
	67	64	54	51	57	64	adhesion molecule with Ig-like domain 3
AMIGO3	61	76	64	72	76	64	uncharacterized LOC104911306
LOC104911306	82	58	63	51	56	64	transmembrane protease, serine 13
TMPS513	65	63	71	53	63	64	bile acid receptor-like
LOC100540309	90	62	92	71	59	64	putative protein TPRXL
LOC104917310	30	81	35	43	40	64	dual specificity phosphatase 3
DUSP4	79	56	84	50	64	64	
EPS8L2							
	99	88	96	79	71	64	epidermal growth factor receptor pathway substrate 15-like 1
LOC104909835	36	66	42	77	65	64	sodium-coupled neutral amino acid transporter 4-like
LEPR							Leo1, Paf1/RNA polymerase II complex component, homolog (S. cerevisiae)
	42	80	52	59	37	64	junctophilin-3
LOC100550763	45	54	69	58	78	64	mothers against decapentaplegic homolog 6-like
LOC104916278	75	62	67	53	65	64	toll-like receptor 4
TLR4	78	54	63	69	78	64	Kazal-type serine peptidase inhibitor domain 1
KAZN	79	61	60	53	65	64	taperin
TPRN	78	73	67	57	67	64	ephrin type-A receptor 3-like
LOC100550885	92	66	74	77	80	64	ryanodine receptor 3-like
LOC100544340	50	35	64	47	39	64	uncharacterized LOC104913360
LOC104913360	57	58	55	52	46	63	
PTPN22							
	55	45	47	37	59	63	protein tyrosine phosphatase, non-receptor type 22 (lymphoid)
TRPC6							
	57	52	63	63	74	63	transient receptor potential cation channel, subfamily C, member 6
LOC104915661	66	57	59	63	77	63	fibronectin-like
SLC22A3							
	131	119	126	73	140	63	solute carrier family 22 (organic cation transporter), member 3
LOC104917458	79	63	69	80	81	63	uncharacterized LOC104917458
MEOX1	78	42	82	64	94	63	mesenchyme homeobox 1
LOC100541270							
	52	54	52	46	36	63	transient receptor potential cation channel subfamily M member 1-like
IKZF4	81	61	87	68	66	63	IKAROS family zinc finger 3 (Aiolos)
LOC100550128	97	109	77	81	108	63	receptor-type tyrosine-protein phosphatase mu
BARX2	65	61	58	31	47	63	BARX homeobox 2
LOC104910861	65	72	62	70	60	63	uncharacterized LOC104910861
LOC104915976							
	83	58	68	65	68	63	putative pre-mRNA-splicing factor ATP-dependent RNA helicase DHX16
KIAA1324L	70	64	83	59	96	63	KIAA1324 ortholog
LOC100550836	82	63	88	82	80	63	glutamate carboxypeptidase 2-like
LOC100539008	73	67	61	65	78	63	hemoglobin subunit alpha-A
LOC104911697	88	71	63	95	77	63	lymphocyte antigen 75-like
LOC104916790							
	100	74	90	72	77	63	single-strand selective monofunctional uracil DNA glycosylase-like
TASP1	79	57	84	62	65	63	taspase, threonine aspartase, 1
LOC104909796	75	72	87	93	70	63	lethal(3)malignant brain tumor-like protein 3
SLC25A37							
	109	55	77	58	79	63	solute carrier family 25 (mitochondrial iron transporter), member 37
ALOX5AP	67	51	65	61	66	63	arachidonate 5-lipoxygenase-activating protein
LOC100549829	82	72	87	78	61	63	serine/arginine-rich splicing factor 5-like
LOC100541356	100	92	109	84	63	63	uncharacterized LOC100541343
LOC100549541	73	57	63	69	65	63	ubiquitin specific peptidase 7

LOC100550289	48	75	52	76	56	63	ankyrin-3-like
NPTX1	89	91	63	72	78	63	neuronal pentraxin I
LOC104914751	62	49	58	53	48	62	ectopic P granules protein 5 homolog
LOC104913894							S-adenosyl-L-methionine-dependent tRNA 4-demethylwyosine synthase-like
	87	46	80	60	63	62	
LOC104915198	73	54	71	64	60	62	E3 ubiquitin-protein ligase RNF38-like
ZDHH4	86	57	79	49	79	62	zinc finger, DHHC-type containing 4
LOC104914815	53	45	57	44	45	62	SH2 domain-containing protein 2A-like
NTNG1	49	39	40	41	42	62	netrin G1
LOC100542357	46	61	62	60	42	62	cyclin-G-associated kinase-like
LOC100540920	62	74	77	91	78	62	tripartite motif-containing protein 7-like
KIF27	54	49	60	70	46	62	kinesin family member 26B
VILL	90	85	51	69	88	62	villin-like
TMEM254	47	51	52	52	54	62	transmembrane protein 254
LOC104916400	70	64	57	58	55	62	forkhead box protein D1-like
LOC104912152	61	57	68	46	60	62	protein FAM162B-like
LGI1	40	57	43	49	61	62	lectin, galactoside-binding-like
LOC104912978	78	57	79	67	70	62	enhancer of mRNA-decapping protein 4-like
FAM131B	84	77	75	67	66	62	family with sequence similarity 131, member A
MYO7B	63	78	60	55	64	62	myosin VIIB
CCDC110	64	58	68	61	53	62	coiled-coil domain containing 109B
SAMD15	67	67	65	64	67	62	sterile alpha motif domain containing 15
LOC104917591	80	48	71	66	76	62	guanylate cyclase soluble subunit alpha-2-like
CCDC91	67	65	71	61	61	62	coiled-coil domain containing 90B
MAP3K9	73	47	53	55	56	62	mitogen-activated protein kinase kinase kinase 9
HPCAL4	69	56	71	53	49	61	hippocalcin-like 1
LOC104909751	78	65	71	79	63	61	AT-rich interactive domain-containing protein 1B-like
RBP1	33	62	36	64	33	61	retinol binding protein 1, cellular
GPR21	79	76	69	68	74	61	G protein-coupled receptor 20
LOC104909587	63	96	75	101	53	61	uncharacterized LOC104909587
LOC104912716	101	107	74	122	97	61	von Willebrand factor-like
P2RY8	58	40	56	50	67	61	purinergic receptor P2Y, G-protein coupled, 8
GPR156	67	49	81	51	59	61	G protein-coupled receptor 15
LOC104913892							
	88	61	76	73	82	61	putative polypeptide N-acetylgalactosaminyltransferase-like protein 3
LPAR2	59	66	60	81	55	61	lysophosphatidic acid receptor 2
LOC100542427	68	57	76	64	59	61	rotatin
LOC100543837	62	52	60	47	48	61	transforming growth factor beta receptor type 3
FAM214B	56	46	62	51	48	61	family with sequence similarity 214, member A
LOC104912443	48	67	66	67	97	61	uncharacterized LOC104912443
LOC104912377	66	45	62	53	69	61	parafibromin-like
B3GALT2							
	97	99	88	60	47	61	UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 2
TMPR55	34	58	45	82	58	61	transmembrane protease, serine 5
LOC104909903	97	71	80	73	86	61	tyrosine-protein kinase SYK
LRRN1	54	40	49	33	40	61	leucine rich repeat neuronal 1
LOC104911046	51	47	63	66	73	61	transcription factor SOX-6-like
LOC104912998	59	60	60	84	53	61	uncharacterized LOC104912998
LOC104911693	70	61	67	79	70	61	anion exchange protein 3-like
LOC104909851	89	53	74	76	71	61	protein SCAF11-like
LOC104914841	72	55	72	61	46	61	uncharacterized LOC104914841
DRP2	80	169	69	93	79	61	drosha, ribonuclease type III
CH25H	67	67	69	51	40	61	cell growth regulator with ring finger domain 1
LOC104915759	48	67	46	62	56	61	josephin-2-like
SLC39A12	68	138	73	49	38	61	solute carrier family 39 (zinc transporter), member 12
LOC104915633	75	44	64	55	48	61	splicing factor 3A subunit 2-like
GFER	70	47	58	53	52	61	glial fibrillary acidic protein
SFRP4	51	63	53	54	39	61	secreted frizzled-related protein 4
LOC104916732	83	68	85	53	57	61	transducin-like enhancer protein 2
LOC104913538	13	41	17	39	4	61	uncharacterized LOC104913538
LOC100542320							
	63	123	45	90	62	61	solute carrier family 2, facilitated glucose transporter member 3
LOC104913802	69	52	67	43	42	61	centrosomal protein of 112 kDa-like
LOC104912854	57	55	60	52	70	61	uncharacterized LOC104912854
LOC104916039	99	68	88	79	71	61	N6-adenosine-methyltransferase 70 kDa subunit-like
LOC104912886	75	64	69	49	74	60	uncharacterized LOC104912886
RPGRIP1L	50	34	75	47	53	60	RPGRIP1-like
LOC104911605	116	140	58	86	103	60	uncharacterized LOC104911605
LOC104917188	56	58	59	62	59	60	uncharacterized LOC104917188
GSTA3	64	49	70	65	83	60	glutathione S-transferase
SLC36A4							
	65	53	54	51	56	60	solute carrier family 36 (proton/amino acid symporter), member 4
CATIP	49	106	71	98	59	60	catalase
LOC104909351	38	68	39	49	29	60	lipid phosphate phosphatase-related protein type 4
CGREF1	46	60	72	29	29	60	cingulin-like 1
LOC100548610	60	49	48	43	53	60	arylamine N-acetyltransferase, pineal gland isozyme NAT-3
KNDC1	69	66	64	58	43	60	lysine (K)-specific methyltransferase 2E
LOC104909829	49	58	63	87	52	60	centrosomal protein of 85 kDa-like pseudogene

LOC104911354						60	amyloid beta A4 precursor protein-binding family B member 1-interacting protein-like
LOC104914631	70	45	47	55	62	60	prolyl 3-hydroxylase family member 4 (non-enzymatic)
THRB	101	67	97	68	115	60	thyroid hormone receptor, beta
LOC104911440	105	80	93	54	90	60	macrophage mannose receptor 1-like
SPDYA	66	81	55	76	49	60	speedy/RINGO cell cycle regulator family member A
LOC104910814	61	52	65	55	63	60	uncharacterized LOC104910814
HTR1D	85	29	68	32	58	60	
	65	65	74	58	60	60	5-hydroxytryptamine (serotonin) receptor 1B, G protein-coupled
LOC104909998	81	54	70	84	57	60	kinase D-interacting substrate of 220 kDa-like
LOC100550673	64	62	57	67	51	60	protein FAM214B
FBXO2	73	73	86	71	66	60	F-box protein, helicase, 18
LOC104910245	72	68	55	61	47	60	cadherin-19-like
LOC104909420	76	46	60	61	59	60	transmembrane protein 135-like
CCDC42B	45	63	40	42	34	60	coiled-coil domain containing 42
SASH3	75	42	59	59	61	60	SAM and SH3 domain containing 3
LOC104911371	62	50	64	43	50	60	uncharacterized LOC104911371
FBN3	94	68	88	80	89	60	fibrillin 2
LOC104915057	51	44	61	48	43	60	structural maintenance of chromosomes protein 5
PDE6C	49	66	65	53	66	60	phosphodiesterase 6C, cGMP-specific, cone, alpha prime
PLCB2	83	69	89	88	95	60	phospholipase C, beta 2
LOC104910853	79	64	57	77	82	60	uncharacterized protein PB18E9.04c-like
MYB	78	60	66	39	52	60	v-myb avian myeloblastosis viral oncogene homolog
GGT5	84	57	69	82	58	60	gamma-glutamyltransferase 1
SSX2IP	56	47	57	45	40	60	synovial sarcoma, X breakpoint 2 interacting protein
SKIDA1	71	73	78	61	59	60	SKI/DACH domain containing 1
LOC104910888	61	59	66	48	43	60	uncharacterized LOC104910888
LOC104913751	62	44	59	47	49	60	uncharacterized LOC104913751
LOC104915053	59	50	74	61	42	60	focadhesin-like
LOC104916453	87	58	75	54	80	60	zinc finger and BTB domain-containing protein 22-like
DYDC1	39	56	48	51	38	60	dishevelled segment polarity protein 3
PNOC	29	64	36	37	38	59	prepronociceptin
LOC104917571	89	42	32	32	34	59	uncharacterized LOC104917571
RGS19	66	48	67	51	59	59	regulator of G-protein signaling 19
LOC104912553	51	58	51	54	35	59	uncharacterized LOC104912553
LOC104911241	75	46	50	60	65	59	uncharacterized LOC104911241
LOC104913755	93	74	84	84	91	59	ephrin type-A receptor 3
LOC104911454	45	53	57	55	42	59	uncharacterized LOC104911454
LPXN	71	49	68	49	66	59	leupaxin
LOC104911843	41	48	50	59	46	59	cat eye syndrome critical region protein 2-like
GAL3ST1	39	57	38	44	38	59	galanin/GMAP prepropeptide
LOC100551127	50	53	59	56	66	59	transcription factor HES-5-like
BATF	31	66	57	51	46	59	basic leucine zipper transcription factor, ATF-like
DOCK2	64	54	71	61	67	59	dedicator of cytokinesis 11
LOC100551155	77	52	59	44	36	59	transmembrane protein 178B-like
LOC104910634	115	106	108	60	126	59	uncharacterized LOC104910634
LOC104913344	45	43	70	48	46	59	uncharacterized LOC104913344
TTBK2	67	63	77	74	62	59	tau tubulin kinase 2
SDC3	61	61	54	65	56	59	syndecan 3
LOC100543145	62	49	61	61	56	59	metallophosphoesterase domain-containing protein 1-like
LOC104909795	79	40	85	52	65	59	rho GTPase-activating protein 18-like
LOC100547566	64	70	79	62	57	59	zinc finger protein 664-like
NEDD4						59	neural precursor cell expressed, developmentally down-regulated 4, E3
	60	55	60	57	49	59	ubiquitin protein ligase
TMEM55A	73	36	67	48	60	59	transmembrane protein 55A
LOC104913462						59	WAP, Kazal, immunoglobulin, Kunitz and NTR domain-containing protein
	94	55	85	42	41	59	1-like
LOC100545114	51	93	52	98	48	59	rho guanine nucleotide exchange factor 38-like
LOC104914876	64	63	62	77	60	59	integrin alpha-1-like
LOC100543496	56	61	58	30	45	59	phospholipase A2 group IB
NELL1	43	52	60	106	49	59	NEL-like 1 (chicken)
LOC104913039	53	62	56	70	54	59	uncharacterized LOC104913039
LOC104910281	58	45	52	61	68	59	microtubule cross-linking factor 1-like
SSCS5D	81	48	73	79	61	59	scavenger receptor cysteine rich family, 5 domains
MEI1	50	60	55	51	45	58	meiosis inhibitor 1
LOC104912658	37	48	37	47	44	58	uncharacterized LOC104912658
LOC104911043	69	63	54	82	64	58	ATP-binding cassette sub-family C member 8-like
MAPK15	74	66	73	61	67	58	mitogen-activated protein kinase 15
LOC104910617	56	53	63	63	50	58	tyrosine-protein phosphatase non-receptor type 13-like
LOC100541366	121	67	98	57	72	58	cytoplasmic dynein 1 intermediate chain 1-like
LOC100545760	62	48	56	63	76	58	protein-arginine deiminase type-1-like
GNAQ						58	guanine nucleotide binding protein (G protein), alpha activating activity
	53	44	52	55	39	58	polypeptide O
LOC104915163	62	52	52	59	45	58	colorectal mutant cancer protein-like
LRRC10B	80	69	76	63	64	58	leucine rich repeat containing 10B
SOGA3	36	47	31	45	39	58	SOGA family member 3
MAB21L1	93	62	87	41	70	58	mab-21-like 1 (C. elegans)
FHIT	61	58	63	64	55	58	FH2 domain containing 1
SMIM18	88	57	52	58	69	58	small integral membrane protein 18

LOC104909311	59	38	66	61	34	58	mucin 6, oligomeric mucus/gel-forming
CCDC37	35	86	29	45	54	58	coiled-coil domain containing 36
TTC33	56	55	70	61	46	58	tetratricopeptide repeat domain 33
SLC22A15	68	48	64	52	66	58	solute carrier family 22, member 15
LOC100550494	66	66	78	83	61	58	metalloreductase STEAP2
LOC104912488	50	41	58	42	87	58	interleukin-23 receptor-like
LOC104911061	57	62	72	44	43	58	uncharacterized LOC104911061
LOC104915765	22	78	37	96	37	58	uncharacterized LOC104915765
LRRC38	117	130	114	77	77	58	leucine rich repeat containing 38
PSTPIP2	106	47	85	81	57	58	proline-serine-threonine phosphatase interacting protein 2
LOC100540050	41	70	72	84	44	58	anoctamin-6-like
LOC104912000	70	48	66	50	47	58	cilia- and flagella-associated protein 43-like
LOC104913498	91	70	78	73	71	58	protein sidekick-1-like
CDC14B	77	69	84	71	71	58	cell division cycle 123
LOC104909602	35	56	47	49	50	58	uncharacterized LOC104909602
CCDC73	79	61	67	74	76	58	coiled-coil domain containing 71-like
LOC104913549	42	41	47	57	40	58	protein SF11 homolog
LOC100547627	57	65	58	65	69	58	cAMP and cAMP-inhibited cGMP 3',5'-cyclic phosphodiesterase 10A-like
LOC100544543	95	59	76	64	85	58	feather keratin Cos1-1/Cos1-3/Cos2-1-like
LOC104910350	70	63	75	73	63	58	centrosome and spindle pole-associated protein 1-like
LOC104913610	56	60	47	55	47	58	uncharacterized LOC104913610
LOC104912514	68	50	62	59	57	58	protein FAM73A-like
ARHGDIG	47	80	59	66	67	58	Rho GDP dissociation inhibitor (GDI) gamma
LOC104910848	82	67	75	55	61	58	limbin-like
KIF25	68	53	60	45	39	58	kinesin family member 24
LOC104913432	64	56	61	35	41	58	nudix hydrolase 1
TSNAXIP1	70	61	68	50	49	58	translin-associated factor X interacting protein 1
LOC104913291	83	64	73	72	102	57	uncharacterized LOC104913291
LRRC70	63	63	64	54	58	57	leucine rich repeat containing 70
CPSF1	72	52	69	61	62	57	carbamoyl-phosphate synthase 1, mitochondrial
LOC104912962	49	62	58	46	43	57	uncharacterized LOC104912962
DNAH3	68	91	96	78	52	57	dynein, axonemal, heavy chain 17
SMOC1	79	66	62	56	60	57	SPARC related modular calcium binding 1
LOC104917038	93	60	78	81	77	57	E3 ubiquitin-protein ligase HUWE1-like
GDAP1	45	59	57	87	73	57	glycine cleavage system protein H (aminomethyl carrier)
ZC3H12C	55	60	58	55	65	57	zinc finger CCH-type containing 12C
CYTH4	59	53	67	58	76	57	cytohesin 1
AADAC	37	105	55	134	68	57	arylacetamide deacetylase
SMPDL3B	74	72	68	62	65	57	sphingomyelin phosphodiesterase, acid-like 3B
LOC100549996	45	44	44	40	36	57	neuropeptide Y receptor type 2-like
LOC100540453	47	76	61	74	84	57	fascin-like
DPF3	46	45	52	43	47	57	dipeptidase 1 (renal)
SLC2A4RG	70	59	70	53	56	57	SLC2A4 regulator
LOC104915738	85	66	60	73	62	57	uncharacterized LOC104915738
HOXC6	47	46	43	39	42	57	homeobox C5
LOC104913997	85	57	69	81	71	57	uncharacterized LOC104913997
LOC104914270	66	54	60	63	45	57	synaptotagmin-1-like
BTBD19	77	66	79	48	64	57	BTB (POZ) domain containing 17
LOC104910459	61	51	63	59	50	57	zinc finger CCH domain-containing protein 3-like
SYT16	56	37	57	62	56	57	synaptotagmin XVI
CNTNAP1	78	70	64	61	52	57	contactin 6
LOC100541860	76	58	60	64	54	57	protein CBA2T1
LOC104911356	55	52	66	61	61	57	uncharacterized LOC104911356
EPHA7	64	51	54	70	64	57	EPH receptor A5
PIGM	62	45	79	46	47	57	phosphatidylinositol glycan anchor biosynthesis, class M
PAQR9	38	57	39	49	64	57	progesterone and adipoQ receptor family member IX
LOC104912417	75	45	62	64	62	57	tyrosine-protein kinase JAK1-like
UNC80	46	52	47	61	62	57	unc-80 homolog (C. elegans)
LOC100546312	82	65	52	83	76	57	E3 ubiquitin-protein ligase HECTD3-like
LOC104911858	60	65	53	69	72	57	thrombospondin type-1 domain-containing protein 7B-like
DNAH12	55	48	56	51	49	57	dynein, axonemal, heavy chain 10
LOC104910098	43	83	38	77	29	57	uncharacterized LOC104910098
LOC104913419	50	37	50	40	51	56	uncharacterized LOC104913419
LOC100542110	57	43	42	52	62	56	olfactory receptor 5V1-like
LOC104912892	62	55	45	50	42	56	uncharacterized LOC104912892
LOC100543839	58	58	61	60	46	56	NADH-cytochrome b5 reductase-like
LOC104914536	83	62	66	61	61	56	inositol 1,4,5-trisphosphate receptor type 3-like
LOC104915116	58	58	89	64	56	56	uncharacterized LOC104915116
LOC104916758	63	54	59	44	54	56	homeobox protein Hox-A4-like
LOC100543147	58	51	70	60	78	56	adenomatous polyposis coli protein-like
LOC100547920	32	50	54	69	35	56	pre-B-cell leukemia transcription factor-interacting protein 1
BHLHE41	65	50	59	49	59	56	basic helix-loop-helix family, member e41
LOC104910385	82	65	74	75	69	56	extracellular matrix protein FRAS1-like
LOC104912909	65	57	56	37	40	56	protein BEAN1-like
LOC104914005	48	45	54	57	62	56	uncharacterized LOC104914005
LOC104916547	64	67	58	78	81	56	dual specificity protein phosphatase 1 pseudogene
CD38	63	66	74	93	96	56	CD36 molecule (thrombospondin receptor)

PYGO2	76	49	73	44	59	56	pygopus family PHD finger 2
VTI1A	54	53	46	49	69	56	vesicle transport through interaction with t-SNAREs 1A
LOC104914351	101	65	53	38	80	56	uncharacterized LOC104914351
TMEM26	65	40	64	44	51	56	transmembrane protein 26
LOC104915909	54	45	50	40	48	56	meteorin-like
LOC104913535	84	58	83	78	58	56	uncharacterized LOC104913535
LOC104913700	79	63	61	57	61	56	uncharacterized LOC104913700
LOC104914411	110	40	126	57	121	56	uncharacterized LOC104914411
LOXHD1	30	36	30	70	35	56	lipoygenase homology domains 1
LOC104916811	45	48	48	46	46	56	uncharacterized LOC104916811
LOC104915760	58	67	51	68	46	56	platelet glycoprotein VI-like
PCDH8	15	20	16	78	17	56	protocadherin 8
LOC100538725	75	51	57	36	51	56	exportin-1-like
LOC104916558	21	19	21	29	20	55	patched domain-containing protein 3-like
MTHFD2L							
	43	35	53	48	42	55	methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 2-like
SUPT3H	63	44	57	43	62	55	suppressor of Ty 3 homolog (S. cerevisiae)
LOC104912348	73	61	53	50	57	55	uncharacterized LOC104912348
LOC104913752	47	44	54	54	32	55	uncharacterized LOC104913752
LOC104916418	69	41	71	63	66	55	U8 snoRNA-decapping enzyme-like
INHBA	61	70	55	54	49	55	inhibin, alpha
SEPT4	49	40	45	62	64	55	septin 4
LOC104909883	73	50	75	64	55	55	activating signal cointegrator 1 complex subunit 3-like
WDR17	98	38	77	59	87	55	WD repeat domain 17
LOC104916563	47	50	51	49	48	55	uncharacterized LOC104916563
LOC100548169	51	44	60	48	48	55	fez family zinc finger protein 2-like
ATP6V1C2	66	38	57	41	65	55	ATPase, H+ transporting, lysosomal 42kDa, V1 subunit C2
CNDP1	56	51	61	67	54	55	CCHC-type zinc finger, nucleic acid binding protein
ARID3A	75	47	68	46	67	55	AT rich interactive domain 3A (BRIGHT-like)
CLIC3	64	71	54	56	56	55	chloride intracellular channel 2
CFTR	64	57	73	64	58	55	CASP8 and FADD-like apoptosis regulator
HAL	47	57	58	41	51	55	hydroxyacylglutathione hydrolase
LOC104914007	54	35	64	34	52	55	receptor-type tyrosine-protein phosphatase T-like
ZC2HC1C	67	59	60	61	66	55	zinc finger, C2HC-type containing 1C
CHMP4C	77	85	60	71	73	55	charged multivesicular body protein 4B
LOC104910639	76	81	70	81	82	55	teneurin-3-like
LOC104914368	37	41	40	34	43	55	uncharacterized LOC104914368
FUT7							
	69	38	79	52	73	55	fucosyltransferase 4 (alpha (1,3) fucosyltransferase, myeloid-specific)
PTCD2	60	38	80	41	60	55	pentatricopeptide repeat domain 2
INA	122	101	90	89	68	55	interphotoreceptor matrix proteoglycan 2
NPAS3	67	70	66	63	80	55	neuronal PAS domain protein 3
LOC104914992	60	45	68	56	76	55	dedicator of cytokinesis protein 8-like
LOC104913071	75	62	81	62	70	55	protein BANP-like
EPHB6	75	64	80	79	68	55	EPH receptor B3
LOC104910785	53	58	56	76	58	55	protein furry homolog-like
LOC100549762							
	51	48	59	61	49	55	pleckstrin homology domain-containing family A member 5-like
FANCA	80	52	70	45	53	55	FANCD2/FANCI-associated nuclease 1
LOC104910823	52	42	48	56	46	55	TBC1 domain family member 14-like
MIEN1	47	45	47	49	39	55	migration and invasion enhancer 1
LOC104911521							
	54	56	47	67	53	55	serine/threonine-protein phosphatase 6 regulatory ankyrin repeat subunit A-like
NALCN	46	50	75	37	55	55	sodium leak channel, non-selective
MLLT3							
	58	45	60	56	64	55	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 3
SUGCT	33	35	32	27	29	55	succinyl-CoA:glutamate-CoA transferase
FAM110C	52	50	43	81	35	55	family with sequence similarity 110, member B
LOC100543595	37	51	35	35	54	55	uncharacterized LOC100543595
LOC104915797							
	69	58	63	64	61	54	amyloid beta A4 precursor protein-binding family B member 1-like
TEN1	59	32	52	23	33	54	TEN1 CST complex subunit
CD180	60	41	61	54	53	54	CD164 sialomucin-like 2
SFMBT2	47	49	57	51	58	54	Scm-like with four mbt domains 2
LOC100549795							
	95	63	79	82	78	54	proline-serine-threonine phosphatase-interacting protein 1-like
LOC104916474	56	83	52	61	54	54	uncharacterized LOC104916474
C2CD3	70	48	57	53	39	54	C2CD2-like
LOC104914883	37	30	31	23	25	54	granzyme K-like
MYH7B	51	153	88	98	58	54	myosin, heavy chain 7B, cardiac muscle, beta
LOC100550569	57	46	51	58	47	54	receptor-type tyrosine-protein phosphatase delta-like
PTPLAD2	51	71	52	66	66	54	protein tyrosine phosphatase-like A domain containing 2
LOC104915430							
	55	49	51	42	35	54	double zinc ribbon and ankyrin repeat-containing protein 1-like
MALL	47	50	56	42	48	54	mal, T-cell differentiation protein-like
RASD2	47	50	51	47	44	54	RASD family, member 2
LOC100549678	42	58	56	60	64	54	fatty acid desaturase 1-like
LOC104915748	52	49	56	50	56	54	integrator complex subunit 3-like
LOC104909819	132	262	102	182	102	54	uncharacterized LOC104909819

TRPV1							
LOC104914875	51	67	58	50	57	54	transient receptor potential cation channel, subfamily V, member 1
LOC104909397	36	46	60	40	44	54	molybdopterin synthase sulfur carrier subunit
							probable dolichyl pyrophosphate Glc1Man9GlcNAc2 alpha-1,3-
LOC104915427	84	61	73	64	53	54	glucosyltransferase
LOC100539126	56	47	46	52	47	54	zinc finger protein 345-like
LOC100550421	45	32	49	33	70	54	solute carrier family 23 member 1-like
GRK7	94	66	74	50	64	54	glioma pathogenesis-related protein 1-like
LOC100541755	107	72	84	61	105	54	G protein-coupled receptor kinase 6
SNX20	45	33	44	49	49	54	lateral signaling target protein 2 homolog
FGFR3	73	56	71	55	67	54	sorting nexin 20
SLC16A14	52	36	53	56	57	54	FGFR1 oncogene partner 2
LOC104913362	59	53	57	32	24	54	solute carrier family 16, member 14
MAP2	22	25	30	46	64	54	uncharacterized LOC104913362
SPSB4	51	59	54	51	59	54	microtubule-associated protein 2
ITGA11	80	56	86	61	69	54	splA/ryanodine receptor domain and SOCS box containing 4
LOC104913691	76	79	114	52	55	54	integrin alpha FG-GAP repeat containing 3
LOC100543059	28	36	28	71	34	54	uncharacterized LOC104913691
LOC100546006	82	40	70	43	44	54	low-density lipoprotein receptor-related protein 1B-like
LOC104913442	82	57	69	62	72	54	WD repeat and FYVE domain-containing protein 3
LOC100546988	46	47	54	60	51	54	uncharacterized LOC104913442
IRF6	39	56	52	61	36	54	signal transducer and activator of transcription 5B
THPO	128	63	93	78	109	54	interferon regulatory factor 5
CHRNA4	51	74	32	52	38	54	thrombopoietin
KCNB2	61	49	44	36	40	54	cholinergic receptor, nicotinic, alpha 3 (neuronal)
ZMAT4	105	82	105	83	67	53	potassium voltage-gated channel, Shab-related subfamily, member 1
SLC2A6	30	71	31	58	29	53	zinc finger, matrin-type 4
LOC104910041	102	51	100	54	73	53	solute carrier family 2 (facilitated glucose transporter), member 6
LOC104912793	103	62	62	68	100	53	24-hydroxycholesterol 7-alpha-hydroxylase
VTN	92	57	67	96	55	53	uncharacterized LOC104912793
LOC100548077	30	48	18	70	23	53	vitronectin
PIK3AP1	51	64	68	75	75	53	transmembrane protein 110-like
LOC100538926	88	46	63	70	89	53	phosphoinositide-3-kinase adaptor protein 1
LOC104909960	47	57	42	76	45	53	heterogeneous nuclear ribonucleoprotein A1-like
PRRX2	34	56	33	51	46	53	transcription elongation factor B polypeptide 3-like
LOC104909345	65	59	76	44	85	53	paired related homeobox 2
ADRA2C	56	145	49	64	44	53	myosin heavy chain, skeletal muscle, adult-like
LOC104911915	66	64	59	54	68	53	adrenoceptor alpha 2C
LOC104916651	51	53	57	64	62	53	ankyrin-3-like
STOML1	102	56	89	68	78	53	ATP-dependent DNA helicase Q4-like
CLDN25	70	60	57	54	82	53	stomatin (EPB72)-like 1
LOC104916148	94	64	57	73	88	53	claudin 23
							granulocyte-macrophage colony-stimulating factor receptor subunit
LOC104913397	54	32	57	48	59	53	alpha-like
FAM184B	59	57	60	60	56	53	Na(+)/H(+) exchange regulatory cofactor NHE-RF2-like
LOC104912359	44	43	58	49	48	53	family with sequence similarity 183, member A
LOC104916961	77	53	61	48	62	53	uncharacterized LOC104912359
LOC104916925	60	52	59	43	59	53	zinc finger protein 621-like
LOC100542756	72	46	49	52	54	53	uncharacterized LOC104916925
LOC104909483	28	46	33	52	46	53	tight junction protein 1
LOC104913778	68	47	57	39	39	53	outer dense fiber protein 3-like
LOC104915490	72	49	55	59	58	53	ATP-dependent DNA helicase Q5-like
LOC100546512	72	53	59	64	63	53	dmX-like protein 2
PAQR7	44	42	51	47	47	53	glutamate receptor ionotropic, delta-1
PASD1	73	55	77	61	104	53	progesterone and adipoQ receptor family member VII
LOC104917145	52	53	47	47	36	53	PAS domain containing 1
LOC104913512	60	33	62	50	47	53	uncharacterized LOC104917145
LOC100540262	55	33	60	39	68	53	uncharacterized LOC104913512
ACAD10	59	60	53	55	51	53	F-box only protein 7-like
GABRR3	35	39	41	36	36	53	acyl-CoA dehydrogenase family, member 10
LOC104910867	45	62	50	63	75	53	gamma-aminobutyric acid (GABA) A receptor, rho 2
LOC100548828	61	50	55	68	54	53	huntingtin-like
LOC104910357	72	56	50	57	95	53	tubulin alpha-8 chain
GGT1	34	39	27	34	29	53	uncharacterized LOC104910357
LOC104910932	45	33	61	41	72	53	geranylgeranyl diphosphate synthase 1
SLC7A4	59	80	51	94	53	53	uncharacterized LOC104910932
LOC100540040	46	45	49	38	39	53	solute carrier family 7, member 4
TBX20	77	63	63	52	69	53	acyl-coenzyme A synthetase ACSM4, mitochondrial
CEP128	87	43	60	46	59	53	putative sodium-coupled neutral amino acid transporter 10
CHRM5	50	41	53	46	44	53	T-box 20
NAALADL2	72	58	70	50	55	53	centrosomal protein 120kDa
MEIOB	34	44	50	41	55	52	cholinergic receptor, muscarinic 4
LOC104916051	66	72	79	54	43	52	N-acetylated alpha-linked acidic dipeptidase-like 2
GPR65	50	39	31	30	41	52	meiosis specific with OB domains
	44	46	43	53	44	52	uncharacterized LOC104916051
	69	33	53	62	54	52	G protein-coupled receptor 64

LOC104914987	111	42	62	50	68	52	microtubule-associated protein 1B-like
SVOPL	59	66	53	63	45	52	SVOP-like
AMN1	76	56	73	69	64	52	antagonist of mitotic exit network 1 homolog (S. cerevisiae)
TMEM132B	81	69	76	65	64	52	transmembrane protein 132B
LOC104914926	72	43	60	46	37	52	uncharacterized LOC104914926
LZTS1	68	44	71	45	59	52	leucine zipper, putative tumor suppressor 1
LOC104911561	109	65	118	46	143	52	uncharacterized LOC104911561
LOC100546656	54	58	57	69	49	52	putative sodium-coupled neutral amino acid transporter 11
LOC104917049	67	40	58	43	58	52	uncharacterized LOC104917049
LOC100548925	84	60	97	50	97	52	tektin-5
CABLES2	70	44	49	42	45	52	Cdk5 and Abl enzyme substrate 1
LOC104912034	69	67	75	59	55	52	uncharacterized LOC104912034
USH2A	38	52	58	53	63	52	Usher syndrome 2A (autosomal recessive, mild)
LOC100550618	77	51	74	59	84	52	CMRF35-like molecule 8
LOC100544424	121	52	52	98	107	52	zinc finger protein 84-like
LGR5	63	61	87	58	55	52	leucine-rich repeat containing G protein-coupled receptor 4
VIP	27	67	65	30	42	52	vasoactive intestinal peptide
C16H16orf45	56	46	61	69	43	52	chromosome 15 open reading frame, human C5orf58
TMEM229B	58	41	54	52	58	52	transmembrane protein 229B
LOC104913942	43	37	61	50	49	52	uncharacterized LOC104913942
GPR17	42	63	54	38	23	52	G protein-coupled receptor 162
ACSBG1	48	60	47	54	49	52	acyl-CoA synthetase bubblegum family member 1
IL22RA1	48	41	46	29	31	52	interleukin 22
GREM2	56	54	58	37	39	52	gremlin 1, DAN family BMP antagonist
LOC100544640	99	65	54	152	76	52	uncharacterized LOC100544636
LOC100544490	61	58	47	60	53	52	stromelysin-1-like
LOC104909620	44	36	40	48	48	52	spastin-like
STXBPSL	57	47	67	52	56	52	syntaxin binding protein 5-like
LOC104909452	49	44	55	42	57	52	uncharacterized LOC104909452
PIGZ	63	59	69	53	52	52	phosphatidylinositol glycan anchor biosynthesis, class Z
LOC100549719	45	70	39	93	44	52	cytoglobin-1-like
LOC104909718	187	96	103	119	187	52	uncharacterized LOC104909718
LOC104910512	44	49	40	45	59	52	uncharacterized LOC104910512
LOC104916185	45	47	63	52	51	52	homeobox protein Hox-B4
LOC104912459	47	61	60	47	56	52	uncharacterized LOC104912459
LOC104913109	65	59	45	49	61	51	dedicator of cytokinesis protein 3-like
LOC104915134	38	41	42	44	41	51	uncharacterized LOC104915134
LOC104916421	70	47	55	53	69	51	zinc finger and BTB domain-containing protein 12-like
COCH	43	127	63	77	38	51	CoA synthase
MEX3A	64	49	57	59	49	51	mex-3 RNA binding family member A
CILP2	29	121	130	37	21	51	cartilage intermediate layer protein, nucleotide pyrophosphohydrolase
LOC104916219	39	25	69	21	53	51	mucin-6-like
LOC104909324	35	68	46	75	45	51	mitogen-activated protein kinase kinase kinase 15-like
LOC104916350	56	69	44	65	103	51	visinin-like
LOC104915045	87	119	93	55	77	51	uncharacterized LOC104915045
SLC44A3	66	46	62	63	56	51	solute carrier family 44, member 3
LOC100541773	67	51	62	45	48	51	cytochrome P450 2J2-like
BMP6	53	56	47	62	60	51	bone morphogenetic protein 6
LOC104911250	114	45	95	38	95	51	uncharacterized LOC104911250
APBA1	63	51	61	50	60	51	amyloid beta (A4) precursor protein-binding, family A, member 1
CSH14orf159	37	60	50	51	44	51	chromosome 5 open reading frame, human C14orf132
LOC100549590	54	66	86	22	32	51	olfactory receptor 1020-like
C3AR1	79	41	69	106	68	51	chromosome 30 open reading frame, human C19orf71
CMPK2	39	46	59	71	47	51	cytidine monophosphate (UMP-CMP) kinase 1, cytosolic
FUT8	51	43	61	45	55	51	fucosyltransferase 7 (alpha (1,3) fucosyltransferase)
LOC104916315	59	99	53	69	63	51	sushi, nidogen and EGF-like domain-containing protein 1
LOC104910922	26	53	34	41	42	51	uncharacterized LOC104910922
CCDC85A	57	44	56	50	54	51	coiled-coil domain containing 84
AAR2	60	39	51	45	53	51	AAR2 splicing factor homolog (S. cerevisiae)
LOC104909695	49	41	62	46	55	51	uncharacterized LOC104909695
OXTR	65	54	48	31	21	51	oxytocin receptor
LOC100540472	47	45	56	62	44	51	myosin-IIb-like
GALNT10	79	66	77	72	56	51	polypeptide N-acetylgalactosaminyltransferase 1
BCL2A1	53	46	48	66	49	51	BCL2-related protein A1
LOC104914360	98	38	81	23	53	51	uncharacterized LOC104914360
MOB3B	72	43	56	32	29	51	MOB kinase activator 3B
LOC100551463	57	40	56	57	45	51	MAP kinase-activating death domain protein-like
LOC104912308	33	30	49	52	52	51	uncharacterized LOC104912308
LOC104914064	67	42	53	55	63	51	protein FAM65C-like
LOC100540610	12	66	7	84	10	51	E3 ubiquitin-protein ligase RNF216
LOC104915398	27	50	32	35	37	51	histone H2A-IV-like
HIC2	68	47	63	61	53	51	3-hydroxyisobutyryl-CoA hydrolase
ADD2	83	32	42	58	82	51	adducin 2 (beta)
THEMIS2	57	41	52	50	57	51	thymocyte selection associated family member 2
CSH11orf16	57	50	51	54	61	51	complement component 5

LOC104915327	46	57	49	63	45	51	ribosomal protein S6 kinase alpha-3-like
LOC104912507							
	53	47	45	57	57	51	microtubule-associated serine/threonine-protein kinase 2-like
LOC100548974	45	237	40	358	20	51	cytochrome P450 2J3-like
LOC104909821	100	61	99	58	52	51	protein FAM184A-like
LOC104913489	29	57	24	86	63	51	testis-expressed sequence 2 protein-like
LOC100551282	40	37	47	44	38	51	dephospho-CoA kinase domain-containing protein-like
LOC104916081	67	40	58	39	51	51	heterogeneous nuclear ribonucleoprotein U-like protein 1
LOC100546503	31	40	48	28	23	50	mitochondrial inner membrane protein COX18
LOC100548376	1621	869	49	987	2652	50	CUGBP Elav-like family member 3
LOC100551250	49	48	57	57	52	50	mitogen-activated protein kinase kinase kinase 5
LOC104913533	45	68	27	43	53	50	uncharacterized LOC104913533
UPF3A	46	36	40	29	33	50	UPF3 regulator of nonsense transcripts homolog A (yeast)
LOC100539384	70	66	75	63	69	50	A-kinase anchor protein 2-like
FGF16	68	75	47	58	69	50	fibroblast growth factor 14
HPGD	32	75	30	81	19	50	4-hydroxyphenylpyruvate dioxygenase-like
CAS4	53	55	55	59	43	50	carbonic anhydrase IV
POLD3	69	53	77	63	65	50	polymerase (DNA-directed), delta 3, accessory subunit
LOC104914980	47	45	61	40	41	50	rho guanine nucleotide exchange factor 28-like
SRGN	62	55	57	59	52	50	serglycin
LOC104917090							
	65	45	46	48	57	50	mediator of RNA polymerase II transcription subunit 25-like
SLC12A5							
	40	45	54	51	47	50	solute carrier family 12 (potassium/chloride transporter), member 5
LOC104913705	52	62	50	16	17	50	uncharacterized LOC104913705
LOC100539736	46	52	44	41	35	50	group IIE secretory phospholipase A2-like
LOC104913676	45	46	51	42	37	50	uncharacterized LOC104913676
LOC104909504	49	48	52	60	39	50	uncharacterized LOC104909504
LOC100542556	33	51	44	38	51	50	myosin heavy chain, skeletal muscle-like
LOC100540978	35	40	44	45	41	50	sodium-coupled neutral amino acid transporter 4-like
NOTCH2NL	49	29	45	40	33	50	notch 2 N-terminal like
LOC104911711	53	49	47	34	32	50	sodium channel protein type 2 subunit alpha-like
C1QTNF7	58	68	79	60	65	50	C1q and tumor necrosis factor related protein 6
LOC100539498	69	45	59	62	60	50	carboxymethylenebutenolide homolog
RVR2	24	36	34	59	55	50	ryanodine receptor 2 (cardiac)
LOC104914243	63	49	65	54	56	50	uncharacterized LOC104914243
PPEF2	38	45	38	52	35	50	protein phosphatase, EF-hand calcium binding domain 2
LOC104911720	59	52	53	73	56	50	E3 ubiquitin-protein ligase UBR3-like
LOC104912964	33	47	41	37	23	50	uncharacterized LOC104912964
SLC25A21							
	85	60	72	41	50	50	solute carrier family 25 (mitochondrial oxoadipate carrier), member 21
CCR4	53	55	62	50	68	50	chemokine (C-C motif) receptor 10
LOC104915977	62	49	62	48	61	50	uncharacterized LOC104915977
LOC104915244	58	56	63	64	50	50	uncharacterized LOC104915244
LOC100548127	91	53	71	63	58	50	poly [ADP-ribose] polymerase 12-like
EDN1	68	61	55	57	59	50	EGF-like repeats and discoidin I-like domains 3
DZANK1	51	47	49	55	55	49	dyslexia susceptibility 1 candidate 1
LOC100545318	49	42	51	37	35	49	sulfotransferase 6B1-like
OLFM1	63	38	63	33	45	49	olfactomedin 1
LOC104912999	54	46	63	33	55	49	uncharacterized LOC104912999
HCN2							
	48	72	48	69	52	49	hyperpolarization activated cyclic nucleotide-gated potassium channel 1
LOC104916154	54	24	36	35	52	49	extensin-like
LOC100546489	66	53	55	61	57	49	arylsulfatase D-like
SBK3	50	56	60	44	66	49	SH3 domain binding kinase family, member 3
LOC100545545	47	41	48	45	35	49	myotubularin-related protein 13-like
LOC100550363							alpha-1,3-mannosyl-glycoprotein 4-beta-N-
	51	39	47	49	56	49	acetylglucosaminyltransferase C
LOC104910377	29	50	37	40	47	49	uncharacterized LOC104910377
CENPA	57	53	39	42	41	49	cell cycle exit and neuronal differentiation 1
LOC104911700	67	48	63	69	88	49	secretory phospholipase A2 receptor-like
CD83	80	53	63	64	74	49	CD82 molecule
LOC100546398	78	54	72	52	48	49	lamin-B1-like
LOC104909866							
	57	53	56	53	36	49	leucine-rich repeats and immunoglobulin-like domains protein 3
LOC104916357	60	65	45	62	45	49	vegetative cell wall protein gp1-like
B3GAT2	54	35	48	47	49	49	beta-1,3-glucuronyltransferase 2
LOC104911785	60	30	48	39	47	49	uncharacterized LOC104911785
LOC104910963	40	39	50	50	50	49	palmitoyltransferase ZDHHC13-like
HVCN1	62	49	43	47	62	49	HUS1 checkpoint homolog (S. pombe)
LOC104913373	57	46	44	49	65	49	protein CLEC16A-like
STK38	54	39	63	48	46	49	serine/threonine kinase 38
EFCAB1							
	35	44	44	35	42	49	endonuclease/exonuclease/phosphatase family domain containing 1
VSIG1	48	41	44	41	45	49	V-set and immunoglobulin domain containing 1
NANP	69	54	65	57	60	49	N-acetylneuraminic acid phosphatase
SLC16A4	59	43	59	40	51	49	solute carrier family 16, member 4
LOC100546012	68	64	65	57	67	49	F-box only protein 6-like
LOC104915411	74	51	53	37	45	49	DNA polymerase alpha catalytic subunit-like

CCDC39	60	37	51	45	54	49	coiled-coil domain containing 37
CELF6	38	41	37	39	40	49	CUGBP, Elav-like family member 5
LOC104915493	38	45	47	48	43	49	fatty acyl-CoA hydrolase precursor, medium chain-like
LOC104915801	103	36	62	45	50	49	uncharacterized LOC104915801
LOC104915912	61	53	54	59	62	49	uncharacterized LOC104915912
RGS11	30	83	38	91	63	49	regulator of G-protein signaling 11
CDHR4	59	48	38	55	49	49	cadherin-related family member 3
LOC104909438	57	54	79	52	44	49	prolyl 4-hydroxylase subunit alpha-3-like
LOC104912836							
	80	51	60	61	64	49	transient receptor potential cation channel subfamily M member 7-like
LOC104911846	55	37	54	45	40	49	DNA annealing helicase and endonuclease ZRANB3-like
G6PC	49	82	57	84	30	49	GTPase activating protein (SH3 domain) binding protein 1
LOC100538975	62	57	70	117	56	49	periodic tryptophan protein 2 homolog
GPR37	120	77	85	56	44	49	G protein-coupled receptor 34
FAM19A3							family with sequence similarity 19 (chemokine (C-C motif)-like), member A2
	78	57	78	59	66	49	
LOC104913628	49	70	20	78	23	49	uncharacterized LOC104913628
LOC104915093	46	37	49	51	44	49	vacuolar protein sorting-associated protein 13A-like
LOC100544389	76	53	71	46	53	49	serpin B10-like
LOC100543128	40	34	55	36	38	49	purpurin
NICN1	48	47	35	31	37	49	nicotin 1
FAIM2	43	57	46	52	88	49	Fas apoptotic inhibitory molecule
GAS2L1	58	50	56	50	59	49	growth arrest-specific 2
LOC104913623	64	38	55	34	54	49	myelin-oligodendrocyte glycoprotein-like
TRIM9	81	54	53	33	56	48	tripartite motif containing 9
UNC5C	51	74	50	29	37	48	unc-5 homolog C (C. elegans)
LOC104912509	49	43	43	47	56	48	uncharacterized LOC104912509
LOC104917358	57	37	65	34	52	48	zinc finger protein 22-like
LOC104909589	40	45	36	31	36	48	uncharacterized LOC104909589
HHP1L2	36	61	46	46	41	48	HHP1-like 1
CELF5	65	43	48	36	52	48	CUGBP, Elav-like family member 4
LOC100545629	47	37	46	41	46	48	laminin subunit alpha-2-like
GLIS1	55	57	49	44	29	48	GLI pathogenesis-related 2
LOC104916787	40	39	32	45	52	48	neutral and basic amino acid transport protein rBAT-like
TRPV3							
	39	52	37	53	48	48	transient receptor potential cation channel, subfamily V, member 3
IL13RA2	28	54	50	50	38	48	interleukin 13 receptor, alpha 1
LOC104912885	47	31	45	44	43	48	uncharacterized LOC104912885
DHX32	66	24	61	29	80	48	DEAH (Asp-Glu-Ala-His) box helicase 30
JAK3	81	43	70	51	75	48	Janus kinase 2
LOC104917155	54	46	71	72	41	48	alpha-mannosidase 2-like
LOC104909372	66	44	51	51	45	48	centrosomal protein KIAA1731-like
SPEF1	29	50	33	37	43	48	sperm flagellar 1
LOC100538782	56	38	42	52	49	48	ras GTPase-activating protein-binding protein 2-like
SCX	28	78	68	22	27	48	scleraxis basic helix-loop-helix transcription factor
MAP3K8	79	117	54	77	47	48	mitogen-activated protein kinase kinase kinase 8
LOC104912418	38	71	34	46	48	48	uncharacterized LOC104912418
LOC104910913	32	23	29	41	34	48	catenin alpha-2-like
IQCE	42	36	42	49	44	48	IQ motif containing D
LOC100538825	60	36	48	35	34	48	FRAS1-related extracellular matrix protein 2-like
LOC104910584	52	62	40	41	52	48	uncharacterized LOC104910584
LOC104915401	39	28	44	29	34	48	histone H1-like
LOC104914660	31	93	40	69	47	48	signal-transducing adaptor protein 2-like
MPP2							
	44	39	39	28	24	48	membrane protein, palmitoylated 2 (MAGUK p55 subfamily member 2)
LOC104911148	46	41	54	49	42	48	intron-binding protein aquarius-like
NLGN3	55	69	39	54	30	48	neuroligin 3
LOC104909739	26	41	23	45	25	48	uncharacterized LOC104909739
LOC100551119	52	44	41	43	41	48	protein sidekick-1
LOC104911573	47	37	54	73	36	48	uncharacterized LOC104911573
LOC104914284	30	48	38	55	23	48	CUB and sushi domain-containing protein 2-like
NGEF	69	53	53	52	60	48	neuronal guanine nucleotide exchange factor
ACKR2	40	40	53	35	48	48	atypical chemokine receptor 2
PTH1H	37	49	54	42	49	48	parathyroid hormone-like hormone
RANBP3L	46	37	39	51	26	48	RAN binding protein 3-like
LOC104915553	65	106	69	50	44	48	collagen alpha-1(XVI) chain-like
ANKRD66	75	38	71	44	53	48	ankyrin repeat domain 66
LOC104913169	24	50	29	58	46	48	uncharacterized LOC104913169
LOC104912628	79	43	67	53	42	48	serine/threonine-protein kinase ATR-like
COLEC11	46	68	64	66	57	48	collectin sub-family member 10 (C-type lectin)
LOC104910472	60	55	56	63	55	48	protein NDRG1-like
HTATIP2	60	59	67	57	54	48	heparan sulfate proteoglycan 2
LOC104909772	59	34	40	43	55	47	uncharacterized LOC104909772
LOC104916517	43	38	47	37	40	47	GRAM domain-containing protein 3-like
LOC100549460	48	97	49	64	36	47	coagulation factor X-like
RASL10B	25	39	40	49	47	47	RAS-like, family 10, member B
LOC100543199							
	52	62	52	56	39	47	interferon-induced, double-stranded RNA-activated protein kinase-like
LOC104916678	39	36	41	27	28	47	cyclin-dependent kinase 12-like

LOC104911661							
NACC2	58	49	32	67	51	47	striated muscle-specific serine/threonine-protein kinase-like
	59	35	61	39	68	47	NACC family member 2, BEN and BTB (POZ) domain containing
LOC104913743	70	58	63	68	44	47	myosin-10-like
LOC104909479	44	43	43	52	51	47	uncharacterized protein KIAA1841-like
DENND2D	70	46	33	58	39	47	DENN/MADD domain containing 2C
LOC104910576	44	41	38	45	41	47	CCR4-NOT transcription complex subunit 6-like
LOC104914829							
	41	33	43	48	41	47	A disintegrin and metalloproteinase with thrombospondin motifs 12
TPBGL	78	31	52	57	76	47	trophoblast glycoprotein-like
TNIP2	49	43	54	50	40	47	TNFAIP3 interacting protein 2
LOC104914697	61	31	60	34	50	47	transcription factor E2-alpha-like
LOC104916380	62	50	52	46	56	47	frizzled-8-like
TRPT1	52	42	51	46	51	47	tRNA phosphotransferase 1
LOC104910680	45	39	48	57	52	47	WD repeat and FYVE domain-containing protein 3-like
MGST2	52	50	51	43	34	47	microsomal glutathione S-transferase 2
LOC100543185	45	30	45	35	35	47	phosphatase and actin regulator 3
LOC104915027	45	46	53	51	48	47	FRAS1-related extracellular matrix protein 1-like
LOC104910869	59	54	60	50	41	47	regulator of G-protein signaling 12-like
GPR135	50	46	47	37	34	47	G protein-coupled receptor 133
LOC104910493							
	53	42	59	42	48	47	bromodomain adjacent to zinc finger domain protein 2A-like
LOC104912255	43	40	37	45	41	47	uncharacterized LOC104912255
FCHO1	72	59	50	45	56	47	FCF1 rRNA-processing protein
LOC104913617	33	29	36	28	33	47	uncharacterized LOC104913617
TRPS1	48	53	59	64	59	47	trichorhinophalangeal syndrome I
LOC104915155	28	34	49	47	27	47	probable ATP-dependent RNA helicase YTHDC2
SRXN1	104	66	74	71	81	47	sulfiredoxin 1
DYX1C1	55	57	58	68	38	47	dystrotelin
ASS1	75	56	78	142	41	47	argininosuccinate synthase 1
LOC104917492	56	61	65	49	64	47	uncharacterized LOC104917492
LOC104915070	52	41	53	41	45	47	transmembrane protein 2-like
LOC104917512	60	34	54	48	46	47	ETS-related transcription factor Elf-1-like
LOC104911086	43	40	40	56	39	47	cytosolic phospholipase A2 beta-like
LOC100538756	51	46	54	51	47	47	triggering receptor expressed on myeloid cells 2-like
LOC104915744							
	50	44	21	71	27	47	voltage-dependent P/Q-type calcium channel subunit alpha-1A-like
F10	57	46	35	60	55	47	ezerin
LOC100547518	68	47	45	50	54	47	pleckstrin homology-like domain family B member 2
LOC104909699	65	64	52	39	44	47	uncharacterized LOC104909699
B9D1	59	40	62	47	43	47	B9 protein domain 1
LOC100541844	80	55	66	55	67	47	uncharacterized LOC100541835
LOC104916975	46	46	55	44	45	47	uncharacterized LOC104916975
C1H12orf50	27	44	38	45	30	47	chromosome 1 open reading frame, human C12orf5
LOC100550418	40	43	43	55	50	47	receptor-type tyrosine-protein phosphatase delta-like
SGPP2	27	39	53	54	86	46	sphingosine-1-phosphate phosphatase 2
EAFF2	83	43	62	48	58	46	ELL associated factor 1
LOC104915706							
	41	28	35	35	34	46	aryl hydrocarbon receptor nuclear translocator-like protein 2
IRG1	45	40	40	202	49	46	interferon regulatory factor 8
LOC100541582	51	36	46	41	33	46	multiple epidermal growth factor-like domains protein 6
LOC104909693	58	45	62	39	56	46	uncharacterized LOC104909693
LOC104913417	50	36	43	42	35	46	E3 ubiquitin-protein ligase SMURF1-like
LOC104916237	71	44	46	45	56	46	uncharacterized LOC104916237
LOC104916290	89	61	60	67	63	46	uncharacterized LOC104916290
LOC104909869	67	33	58	32	45	46	protein MMS22-like
LOC100545269	59	46	52	61	61	46	uncharacterized LOC100545266
LOC100541598	59	34	54	59	27	46	interferon-induced guanylate-binding protein 1-like
SLC24A3	39	33	30	44	38	46	solute carrier family 24 (sodium/potassium/calcium exchanger), member 3
LOC104914830							
	42	37	38	53	38	46	A disintegrin and metalloproteinase with thrombospondin motifs 12
LOC104912648	46	42	44	56	40	46	centrosomal protein of 63 kDa-like
LOC104913612	65	48	55	44	62	46	F-box/WD repeat-containing protein 8-like
LOC104911887	57	45	45	48	49	46	ELKS/Rab6-interacting/CAST family member 1-like
PTCH2	54	57	45	41	47	46	patched 2
LOC104909937	48	46	40	47	46	46	rho guanine nucleotide exchange factor 10-like
RHNO1	45	37	41	44	40	46	RAD9-HUS1-RAD1 interacting nuclear orphan 1
LOC104915457	36	34	44	42	54	46	uncharacterized LOC104915457
LOC104914301	111	51	101	39	82	46	uncharacterized LOC104914301
SHB	66	41	53	48	46	46	Src homology 2 domain containing adaptor protein B
NOX1	47	38	46	22	38	46	NADPH oxidase 1
LOC104912184	69	53	55	46	68	46	uncharacterized LOC104912184
LOC104910705	63	42	51	42	50	46	uncharacterized LOC104910705
LOC104914412	17	31	14	44	12	46	natural killer cell receptor 2B4-like
LOC104914312	72	51	56	67	56	45	zinc finger MYM-type protein 4-like
LOC100539575	53	42	52	44	55	45	talin-2
CRYM	19	28	48	41	20	45	crystallin, gamma S

TEX11	49	46	58	42	51	45	testis expressed 11
LOC104911806	42	45	39	56	46	45	CLIP-associating protein 1-like
XKR7	63	62	66	64	61	45	XK, Kell blood group complex subunit-related family, member 7
LOC104913290	28	52	55	92	30	45	uncharacterized LOC104913290
LOC104913090	55	48	56	41	63	45	uncharacterized LOC104913090
LOC104917441	81	38	62	35	44	45	uncharacterized LOC104917441
LOC104914207	62	49	65	50	50	45	polyhomeotic-like protein 2
LOC104912013	51	44	49	45	45	45	uncharacterized LOC104912013
AGT	26	21	21	29	24	45	angiotensinogen (serpin peptidase inhibitor, clade A, member 8)
LOC104912851	42	47	47	59	50	45	uncharacterized LOC104912851
LOC104912632	63	43	45	51	59	45	WD repeat and FYVE domain-containing protein 1-like
C16H16orf96	40	44	31	29	34	45	chromosome 16 open reading frame, human C16orf96
PACSIN1	23	29	31	43	45	45	protein kinase C and casein kinase substrate in neurons 1
PTPRK	42	44	59	39	48	45	protein tyrosine phosphatase, receptor type, K
SGMS2	53	60	60	56	44	45	sphingomyelin synthase 2
LOC104914104	42	41	49	44	38	45	cerebral cavernous malformations 2 protein
MYO1G	54	37	43	37	47	45	myosin IG
LOC100549247	38	33	34	38	34	45	zinc finger protein 586-like
LOC104915277	53	37	55	44	36	45	uncharacterized LOC104915277
LOC104910729	38	48	44	47	56	45	uncharacterized LOC104910729
LOC100546913	42	66	42	36	38	45	semaphorin-5B
UBAP1L	59	68	58	54	57	45	ubiquitin associated protein 1-like
PIH1D3	42	49	37	38	21	45	PIH1 domain containing 3
LOC104914407	85	37	66	45	85	45	natural killer cell receptor 2B4-like
GGACT	36	38	44	32	45	45	golgi-associated, gamma adaptin ear containing, ARF binding protein 3
LOC100545125	53	47	52	46	55	45	G-protein coupled receptor 35-like
LOC104912246	36	38	38	32	24	45	uncharacterized LOC104912246
GCG	73	39	64	45	47	45	GC-rich sequence DNA-binding factor 2
LEKR1	69	42	58	41	56	45	left-right determination factor 1
LOC104912593	42	36	44	43	33	45	ETS translocation variant 5-like
LOC100542821	29	45	21	37	27	45	annexin A1
EVPL	62	72	54	64	67	45	Enah/Vasp-like
LOC104915556	46	46	46	42	40	45	uncharacterized LOC104915556
LOC104915006	34	30	36	43	22	45	transcription factor RFX3
LOC104911023	37	61	47	46	43	45	uncharacterized LOC104911023
LOC100541450	37	52	55	76	44	45	glutamate receptor ionotropic, delta-2-like
SYNDIG1L	52	20	45	28	46	44	synapse differentiation inducing 1-like
LOC104912871	44	48	38	37	30	44	uncharacterized LOC104912871
LOC104911396	51	47	53	54	33	44	uncharacterized LOC104911396
LOC104914235	58	75	47	40	38	44	uncharacterized LOC104914235
LOC104910404	59	46	60	54	54	44	protein CBFA2T1-like
LOC104910455	84	38	49	29	80	44	uncharacterized LOC104910455
LOC104911610	52	47	53	40	36	44	uncharacterized LOC104911610
KCNAB1	67	67	74	45	71	44	potassium voltage-gated channel, shaker-related subfamily, member 6
DDIAS	55	47	50	46	41	44	DDHD domain containing 2
LOC104916832	20	24	25	29	98	44	uncharacterized protein DDB_G0271670-like
HK3	45	57	25	38	37	44	hexokinase 2
LOC104909816	37	49	34	31	27	44	uncharacterized LOC104909816
LOC104916647	33	28	32	29	32	44	histone H2A-like
ADCYAP1	59	37	58	32	44	44	adenylate cyclase activating polypeptide 1 (pituitary)
LOC104916572	25	27	20	15	26	44	uncharacterized LOC104916572
PIH1D2	42	53	45	41	40	44	PIH1 domain containing 2
LOC104915440	47	38	56	40	38	44	uncharacterized LOC104915440
LOC104910285	61	61	54	45	58	44	cadherin-7
CDC20B	40	31	48	27	29	44	cell division cycle 20
LOC104917210	50	43	48	44	49	44	semaphorin-4C-like
LOC100547451	46	42	51	41	38	44	acidic mammalian chitinase-like
TXNRD1	66	37	52	47	70	44	thioredoxin reductase 1
LOC104915736	41	28	54	24	45	44	gem-associated protein 8 pseudogene
KCNMB1	49	91	54	66	76	44	potassium large conductance calcium-activated channel, subfamily M, alpha member 1
LOC104914410	44	28	40	29	49	44	uncharacterized LOC104914410
LOC104910577	52	45	63	54	43	44	extracellular matrix protein FRAS1-like
MAP3K6	49	34	45	39	66	44	mitogen-activated protein kinase kinase 6
ALDH1A1	41	66	44	53	92	44	aldehyde dehydrogenase 1 family, member A1
LOC104917059	60	35	44	40	37	44	histone-lysine N-methyltransferase SETD1A-like
LOC104914495	51	28	46	39	55	44	uncharacterized LOC104914495
PRSS56	10	18	17	26	11	44	protease, serine, 56
XKR5	53	48	33	30	27	44	XK, Kell blood group complex subunit-related family, member 5
LOC104909625	38	42	34	45	36	44	cysteine-rich motor neuron 1 protein-like
LOC104917616	51	32	42	37	44	44	guanylate cyclase soluble subunit alpha-2
LOC104915950	60	40	41	33	42	44	early growth response protein 3-like
ENO2	57	39	48	30	46	44	enolase 1, (alpha)

LOC100540409						arf-GAP with SH3 domain, ANK repeat and PH domain-containing protein
	55	44	56	48	62	44
CASC1	48	43	54	41	36	44
LOC104911270	66	47	69	60	66	44
NR6A1	47	48	53	48	40	44
LOC104913088	41	39	52	42	40	44
KCNJ10						
	32	45	47	36	71	44
LOC104915150						
	52	36	48	47	38	44
LOC104910327	56	43	53	46	38	44
LOC104910647	39	60	37	63	33	44
LOC100540688	50	49	56	49	43	44
LOC104912118	52	45	44	41	45	44
LOC104911219	33	34	48	56	77	43
LOC104915486	51	44	59	35	48	43
LOC104915791	50	54	41	47	44	43
CFAP99	36	31	37	35	32	43
DNAJB13	24	44	28	40	37	43
LOC104910214	50	56	62	62	49	43
LOC104912384	57	52	57	45	38	43
PCDH11X	53	43	55	34	33	43
S100A4	102	53	76	49	83	43
PROX1	75	60	61	60	66	43
LOC104913631	90	73	93	78	75	43
LOC104911114	60	52	53	49	54	43
TRAF5	38	36	42	40	57	43
GLP2R	40	38	50	50	56	43
LOC104911513	46	37	32	32	30	43
S1PR2	68	52	56	48	46	43
LOC104909346	44	33	33	34	39	43
LOC104912954	59	47	47	60	60	43
LOC100550192	51	43	46	50	35	43
NOXO1	60	51	46	55	46	43
ATP6AP1L						
	76	41	51	30	41	43
RBM44	51	43	39	40	63	43
LOC104916915	43	41	40	47	30	43
LOC104916581	71	29	73	8	38	43
ANKRD34B	59	39	46	34	60	43
RAP1GAP2	60	30	46	37	41	43
WRNIP1	52	46	49	35	45	43
CFI	67	34	58	29	55	43
SLA	34	30	44	44	43	43
IKBKE						
	53	36	48	41	55	42
IRF5	60	47	57	55	61	42
EDARADD	70	38	66	50	71	42
LENG8	58	44	48	53	48	42
LOC104914806	54	43	64	49	44	42
LOC104913289	78	45	52	55	103	42
LOC100550460	22	46	35	43	48	42
LOC104916707	44	61	48	50	42	42
CNGA3	32	32	43	38	51	42
LOC104910921	66	41	54	42	40	42
LOC104910525	39	39	50	36	28	42
CA6	80	53	61	100	99	42
NGF	47	43	42	30	41	42
LOC104909317	34	44	43	34	30	42
LOC100545624	43	43	38	67	28	42
HMGCLL1	42	25	40	33	39	42
MPL	80	58	76	54	58	42
LOC104912370	25	31	51	38	23	42
WDR83	47	41	49	35	42	42
LOC104916401	29	36	41	35	45	42
MYADM	46	40	45	51	70	42
LOC104912956						
	53	46	52	47	55	42
LOC104914344	27	55	35	50	44	42
LOC104913723	36	31	40	38	48	42
LOC104910873	57	47	39	36	51	42
LOC104914148	45	38	49	59	60	42
HSBP1L1	37	33	42	27	29	42
LOC104914302	24	39	23	39	24	42
BCL2L13	59	46	60	49	41	42
LOC104913387	22	52	18	39	37	42
LOC104913763	51	35	59	40	57	42
LOC104915154	45	41	51	54	32	42
CCDC27	38	42	31	41	48	42

GABRA1	27	28	44	44	38	42	GA binding protein transcription factor, beta subunit 2
LOC104915153	45	33	51	54	35	42	probable ATP-dependent RNA helicase YTHDC2
ALCAM	72	61	81	56	74	42	activated leukocyte cell adhesion molecule
QRFR	29	39	37	61	36	42	pyroglutamylated RFamide peptide receptor
CRISPLD1	57	56	60	53	50	42	cysteine-rich PDZ-binding protein
LOC104914703	51	53	48	19	45	42	uncharacterized LOC104914703
MATN1	24	252	40	46	27	42	matrilin 1, cartilage matrix protein
LOC104910755	48	48	59	49	39	41	rho GTPase-activating protein 7 pseudogene
GPC3	55	31	56	38	42	41	glypican 1
LOC104914253	41	33	35	36	26	41	uncharacterized LOC104914253
TRAF1	65	50	64	38	40	41	TNF receptor-associated factor 1
TMEM132D	32	38	41	33	36	41	transmembrane protein 132D
DLEC1	9	51	21	36	15	41	dihydrolipoamide dehydrogenase
GPRIN2	16	42	24	33	10	41	G protein regulated inducer of neurite outgrowth 1
LOC104910604	46	49	47	41	60	41	uncharacterized LOC104910604
LOC104913581	54	36	50	50	38	41	uncharacterized LOC104913581
LOC100544113	23	0	107	10	36	41	PPARGC1 and ESRR induced regulator, muscle 1
WDPCP	27	33	33	31	37	41	WD repeat containing planar cell polarity effector
LOC104911637	29	17	20	29	40	41	uncharacterized LOC104911637
FA2H	33	45	33	38	37	41	coagulation factor IX
LOC104912212	41	29	36	25	35	41	uncharacterized LOC104912212
LOC104917251	25	28	18	39	47	41	uncharacterized LOC104917251
C28H1orf116	71	45	63	54	67	41	chromosome 26 open reading frame, human C11orf88
LOC104912520	7	34	10	22	10	41	rho GTPase-activating protein 32-like
RAB37	43	31	57	39	60	41	RAB37, member RAS oncogene family
LOC104914577							
	34	36	49	44	41	41	pleckstrin homology domain-containing family M member 1-like
LOC100542159	40	23	36	29	48	41	G-protein coupled receptor 183-like
LOC100544125	40	35	33	47	29	41	uncharacterized LOC100544124
LOC104910573	41	36	45	45	42	41	probable E3 ubiquitin-protein ligase HERC4
KIRREL3	34	27	27	35	24	41	kin of IRRE like (Drosophila)
AKR1D1	60	67	92	50	57	41	aldo-keto reductase family 1, member D1
LOC104913924	37	36	41	40	34	41	ubiquitin carboxyl-terminal hydrolase 32-like
LOC104914208	45	33	36	43	35	41	ephrin type-B receptor 2-like
LOC100540871	29	5	118	14	39	41	intestinal-type alkaline phosphatase-like
NCS1	59	35	50	26	32	41	neuronal calcium sensor 1
TLL1	52	63	53	44	86	41	tolloid-like 1
FGF18	31	48	30	33	27	40	fibroblast growth factor 16
PFN4	27	35	35	29	31	40	profilin family, member 4
LOC100546440	47	42	43	40	52	40	tyrosine 3-monooxygenase-like
LOC104911567	57	46	57	62	42	40	uncharacterized LOC104911567
LOC100548520	73	81	43	59	95	40	pre-mRNA 3'-end-processing factor FIP1-like
LOC104914752	36	26	44	34	23	40	ectopic P granules protein 5 homolog
LOC104915986	23	58	38	78	50	40	ankyrin repeat and SOCS box protein 16-like
LOC104915858	28	43	35	46	40	40	leucine-rich repeat-containing protein 51-like
ARSG	28	52	43	53	34	40	arylsulfatase G
IFNLRL1							
	72	38	54	35	42	40	interferon gamma receptor 2 (interferon gamma transducer 1)
LOC104909676	66	38	54	40	37	40	ribokinase-like
LOC104911867	67	34	44	36	35	40	uncharacterized LOC104911867
LOC104917146	42	27	41	34	24	40	uncharacterized LOC104917146
LIF	54	48	48	25	37	40	lipic acid synthetase
LOC104915091	37	32	37	43	26	40	vacuolar protein sorting-associated protein 13A
LOC100545676	40	34	31	32	26	40	tyrosine-protein phosphatase non-receptor type 2
LOC104912275	25	38	43	45	18	40	uncharacterized LOC104912275
LOC100539660	45	28	45	64	49	40	nudC domain-containing protein 1-like
MOV10	66	59	59	59	44	40	Mov10 RISC complex RNA helicase
LOC104915118	36	28	36	34	25	40	aminopeptidase O-like
LOC100542433	37	54	47	55	50	40	histamine N-methyltransferase-like
LOC104913178	27	23	36	45	27	40	uncharacterized LOC104913178
LOC104910646	44	31	55	38	44	40	uncharacterized LOC104910646
LOC104909884	47	41	51	40	44	40	activating signal cointegrator 1 complex subunit 3-like
SAMS1	38	27	38	39	35	40	SAM domain, SH3 domain and nuclear localization signals 1
MYO7A	56	39	54	37	55	40	myosin VIIA
SOC51	57	48	52	37	39	40	suppressor of cytokine signaling 1
LOC104916358							arf-GAP with coiled-coil, ANK repeat and PH domain-containing protein 1-like
	43	41	26	36	40	40	like
LRG1	73	31	55	38	58	40	leucine-rich alpha-2-glycoprotein 1
PDZRN4	65	49	62	52	55	40	PDZ domain containing ring finger 4
LOC104909371	45	34	43	34	40	40	centrosomal protein KIAA1731-like
LOC104915216	53	35	55	43	46	40	protein Hook homolog 3-like
LOC100548991	35	58	33	62	42	40	dysferlin-like
LOC104912120	38	37	36	41	31	40	serine/threonine-protein kinase WNK4-like
LOC104914425	54	53	45	45	57	40	cell adhesion molecule 3
LOC104911519	36	29	35	30	23	40	uncharacterized LOC104911519
LOC104912372	48	41	50	54	44	40	calmodulin-regulated spectrin-associated protein 2-like
LOC104917556	39	46	41	42	33	40	uncharacterized LOC104917556
LOC100545443							
	27	29	30	28	28	40	D-beta-hydroxybutyrate dehydrogenase, mitochondrial-like

TTLL2	65	39	53	28	33	40	tubulin tyrosine ligase-like family, member 2
HOXD8	41	32	43	31	30	40	homeobox D4
LOC104917608	41	38	59	45	31	40	rho GTPase-activating protein 42-like
LOC104911602	47	31	47	34	28	40	PCNA-interacting partner-like
LOC104913345	46	27	46	26	32	39	uncharacterized LOC104913345
LOC104914327	55	33	41	34	35	39	potassium voltage-gated channel subfamily KQT member 4-like
LRMP	45	38	52	39	52	39	lymphoid-restricted membrane protein
LOC100546639	48	34	52	40	39	39	olfactory receptor 52R1
CITED2	56	46	48	50	60	39	citron rho-interacting serine/threonine kinase
LOC100542633	45	24	39	27	37	39	vascular endothelial growth factor receptor 2-like
LOC104916505	64	51	56	44	48	39	DNA-directed RNA polymerase III subunit RPC7-like
RHBDL3	52	26	38	29	49	39	rhomboid, veinlet-like 3 (Drosophila)
LOC104911195	39	23	32	18	25	39	uncharacterized LOC104911195
LOC104909392	63	24	57	24	35	39	glycerophosphodiester phosphodiesterase domain-containing protein 4-like
LOC104916261	51	48	52	37	42	39	homeobox protein Hox-B7-A-like
LOC104911292	19	25	40	18	22	39	uncharacterized LOC104911292
LOC104909732	42	41	50	49	35	39	mitogen-activated protein kinase kinase 5-like
LOC104915561	34	35	35	33	41	39	uncharacterized LOC104915561
ELFN2	30	26	39	27	39	39	extracellular leucine-rich repeat and fibronectin type III domain containing 1
HHIP	36	54	58	52	40	39	hematopoietically expressed homeobox
DCP2	38	24	34	29	34	39	decapping mRNA 18
LOC104910156	38	96	52	55	37	39	cadherin-12-like
LOC104913502	44	27	47	30	39	39	mitotic spindle assembly checkpoint protein MAD1-like
LOC104913390	38	39	45	46	46	39	multidrug resistance-associated protein 1-like
LOC104917472	36	36	43	34	33	39	progesterone immunomodulatory binding factor 1
LOC104912462	50	64	49	55	48	39	uncharacterized LOC104912462
LOC104912442	29	19	19	12	15	39	uncharacterized LOC104912442
LOC104910099	56	41	34	46	53	39	uncharacterized LOC104910099
LOC104911409	46	36	43	38	55	39	probable acyl-CoA dehydrogenase 6
LOC104909484	29	34	28	42	30	39	centrosomal protein kizuna-like
OSBPL7	60	45	45	50	49	39	oxysterol binding protein-like 7
LOC100543636	33	14	106	24	38	39	PCTP-like protein
LOC104910221	38	36	29	32	32	39	uncharacterized LOC104910221
SNAP91	42	33	41	23	28	39	synaptosomal-associated protein, 91kDa
LGALS3	63	66	49	42	60	39	lectin, galactoside-binding, soluble, 2
TSPEAR	53	36	31	41	34	39	thrombospondin-type laminin G domain and EAR repeats
LOC104916693	46	36	46	36	37	39	AT-hook-containing transcription factor-like
LOC104916702	42	33	41	44	39	39	uncharacterized LOC104916702
LOC104915170	22	27	31	35	23	39	uncharacterized LOC104915170
LOC100543167	40	28	40	37	28	39	nuclear pore complex protein Nup93
LOC104913598	53	39	44	44	56	39	RNA-binding protein Musashi homolog 1-like
LOC104917040	47	24	33	30	33	39	36.4 kDa proline-rich protein-like
LOC104912217	25	19	27	28	25	39	X-linked interleukin-1 receptor accessory protein-like 2
GRPR	31	39	39	45	44	39	GrpE-like 2, mitochondrial (E. coli)
TMEM106C	32	27	39	28	37	39	transmembrane protein 106C
LOC100545648	33	26	29	27	20	39	putative Polycomb group protein ASXL3
LOC104914932	51	39	55	49	35	38	protein LAP2-like
LOC104916121	37	66	34	63	51	38	potassium voltage-gated channel subfamily A member 7-like
LOC100548199	53	36	37	32	30	38	homeobox protein CDX-1-like
LOC100538862	68	66	53	48	72	38	leucine-rich repeat-containing protein 75A-like
LOC104916869	66	41	48	46	62	38	tripartite motif-containing protein 2-like
LOC104910470	22	25	33	29	37	38	zinc finger protein ZFAT-like
FHL2	32	67	52	52	54	38	four and a half LIM domains 1
LOC104915868	49	34	39	40	47	38	pyruvate carboxylase, mitochondrial-like
LOC100548288	58	28	35	45	47	38	USP6 N-terminal-like protein
LHCGR	47	53	47	60	20	38	luteinizing hormone beta subunit
LOC104910332	40	32	42	31	41	38	gamma-1-syntrophin-like
LOC104913707	25	35	22	38	25	38	uncharacterized LOC104913707
LOC100546535	48	32	37	29	44	38	procollagen galactosyltransferase 1-like
LOC100539648	48	41	59	44	49	38	uncharacterized LOC100539648
LHFPL5	42	55	46	68	25	38	lipoma HMGIC fusion partner-like 4
FAM185A	38	39	44	62	35	38	family with sequence similarity 184, member B
OTOGL	60	46	49	71	69	38	otogelin-like
TRPC3	41	29	35	29	36	38	transient receptor potential cation channel, subfamily C, member 3
LOC104916285	35	34	29	25	29	38	E3 ubiquitin-protein ligase TRIM39 pseudogene
LOC100548130	50	33	47	37	43	38	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase beta-1-like
ENTPD3	59	47	53	51	57	38	ectonucleoside triphosphate diphosphohydrolase 2
LOC104910042	36	36	43	25	35	38	uncharacterized LOC104910042
PMFBP1	35	36	26	30	30	38	polyamine modulated factor 1 binding protein 1
LOC104909844	37	32	50	36	34	38	uncharacterized LOC104909844
LOC104914053	48	28	47	32	61	38	signal-regulatory protein beta-1 isoform 3-like
FIGNL2	39	33	39	34	34	38	fidgetin-like 1
TRIM14	44	42	45	30	33	38	tripartite motif containing 14

LOC100539773	39	35	38	37	48	38	vacuolar protein sorting-associated protein 33B-like
LOC104909562	22	38	22	59	12	38	TFIIA-alpha and beta-like factor
LOC104911662	24	32	33	32	37	38	uncharacterized LOC104911662
CD55	41	37	30	38	56	38	CD5 molecule
LOC104916862	37	30	25	29	34	38	transcription factor E3-like
LOC100546764	37	33	36	32	35	38	transcription factor SOX-6
LOC104912431	26	30	16	19	22	38	uncharacterized LOC104912431
DRAXIN	57	31	48	35	34	38	DNA-damage regulated autophagy modulator 2
LOC104912220	27	36	27	28	36	38	uncharacterized LOC104912220
ASB9	67	43	68	39	57	38	ankyrin repeat and SOCS box containing 9
LOC104917479	47	23	37	33	24	38	protein aurora borealis-like
HTR2B							
	48	40	40	39	45	38	5-hydroxytryptamine (serotonin) receptor 1F, G protein-coupled
NR2E1	31	55	36	41	37	38	nuclear receptor subfamily 2, group E, member 1
LOC104917540	23	36	21	38	16	38	uncharacterized LOC104917540
LOC104917620	47	62	39	29	37	38	uncharacterized LOC104917620
KCNIP4	27	27	28	35	38	37	Kv channel interacting protein 2
LOC100543744	55	30	42	43	48	37	60S ribosomal protein L17-like
LOC104909352	22	35	35	32	36	37	phosphatidylinositol 3-kinase regulatory subunit alpha-like
TWIST2	42	26	38	25	29	37	twist family bHLH transcription factor 2
DHX9	46	59	63	63	47	37	DEAH (Asp-Glu-Ala-His) box polypeptide 8
LOC104915729	42	35	48	49	44	37	E3 ubiquitin-protein ligase HUWE1-like
LOC104910273	44	39	43	35	31	37	interleukin-15 receptor subunit alpha-like
LOC104911372	67	53	62	43	59	37	uncharacterized LOC104911372
LOC104910984	49	27	37	38	36	37	myotubularin-related protein 13-like
LOC104911798	49	32	42	36	39	37	uncharacterized LOC104911798
LOC104913621	68	44	64	46	53	37	antigen peptide transporter 1-like
LOC104911759	43	42	32	53	47	37	non-homologous end-joining factor 1-like
LOC104914780	50	44	43	31	35	37	protein unc-13 homolog B-like
LOC104912616	30	41	31	35	35	37	basic salivary proline-rich protein 1-like
KIAA1549L	40	33	41	31	17	37	KIAA1524 ortholog
NRARP	45	28	36	34	50	37	NOTCH-regulated ankyrin repeat protein
LOC104912328	47	27	42	27	27	37	uncharacterized LOC104912328
RAB40B	40	50	44	40	45	37	RAB40B, member RAS oncogene family
FTO	31	30	33	29	26	37	ferritin, heavy polypeptide 1
GPR160	35	37	37	34	32	37	G protein-coupled receptor 158
LOC104909539	36	29	44	29	24	37	protein jagged-1-like
LOC104913217	36	33	39	45	28	37	ankyrin repeat and KH domain-containing protein 1-like
LOC104911380	54	41	42	33	55	37	uncharacterized LOC104911380
UPB1	37	28	42	40	43	37	ureidopropionase, beta
LOC104917337	37	40	39	39	37	37	neuralized-like protein 2
LOC100549485	21	28	28	16	15	37	ephrin type-A receptor 4-like
LOC104915889	38	38	53	41	56	37	C-type lectin domain family 17, member A-like
HEPACAM	46	59	41	44	42	37	Hep21
RNF157	78	42	80	62	97	37	ring finger protein 157
LCP2	46	25	42	33	44	37	lymphocyte cytosolic protein 1 (L-plastin)
LOC104911368	41	19	37	23	28	37	uncharacterized LOC104911368
DBNDD1	42	50	62	54	55	37	drebrin 1
LOC100541961	22	55	24	75	30	37	DENN domain-containing protein 5B-like
LOC104914013	48	28	51	40	32	37	receptor-type tyrosine-protein phosphatase T-like
LOC104914280	47	34	38	29	23	37	uncharacterized LOC104914280
ANKRD42	38	37	42	29	30	37	ankyrin repeat domain 42
LOC104913446	36	32	47	34	40	37	uncharacterized LOC104913446
LOC100541072	32	56	27	48	54	37	E3 ubiquitin-protein ligase TRIM39-like
LOC104917027	32	40	48	42	63	37	uncharacterized LOC104917027
RBP7	93	103	54	124	39	37	retinol binding protein 7, cellular
LOC104911401	40	34	48	31	45	37	uncharacterized LOC104911401
LOC104914060	38	34	38	33	34	37	extracellular sulfatase Sulf-2-like
LOC104909319	32	26	37	34	21	37	myotubularin-related protein 13-like
UPP1	44	31	40	19	35	37	uridine phosphorylase 1
LOC104916275	48	36	42	37	30	37	cytoplasmic tRNA 2-thiolation protein 1-like
DSP	35	39	27	51	42	37	DSN1, MIS12 kinetochore complex component
LOC104911448	68	52	51	43	47	37	uncharacterized LOC104911448
CPNE4	56	29	41	30	34	37	copine II
PTPRJ	42	40	45	42	32	37	protein tyrosine phosphatase, receptor type, J
LOC104914165	43	36	44	36	37	37	arginine-glutamic acid dipeptide repeats protein-like
LOC100543947	22	49	30	62	43	37	uncharacterized LOC100543930
SNX22	25	51	31	41	30	37	sorting nexin 22
INHA	48	15	31	17	37	37	inhibitor of growth family, member 5
LOC104916680	55	34	41	40	39	37	notchless protein homolog 1-like
SYT17	55	46	52	33	46	37	synaptotagmin XVII
EFHD2	42	31	30	34	34	37	EF-hand domain family, member D1
LOC104912041							
	25	32	38	48	24	37	pleckstrin homology domain-containing family A member 5-like
LOC100550908	34	28	20	24	21	37	uncharacterized LOC100550908
LOC104911252	15	32	23	32	56	36	uncharacterized LOC104911252
LOC104915342	39	30	33	45	29	36	transcription factor TFIIIB component B'' homolog
RNF152	35	33	39	32	40	36	ring finger protein 152
DNAI2	28	50	40	55	48	36	dynein, axonemal, heavy chain 5

MAPK10	16	43	61	57	67	36	mitogen-activated protein kinase 10
LOC104910776	27	45	27	39	51	36	PGAP2-interacting protein-like
LOC100540561	37	34	37	34	38	36	huntingtin
LOC104916868	59	56	46	58	45	36	uncharacterized LOC104916868
HOXB2	48	31	38	30	42	36	homeobox B13
LOC104912337	55	34	40	38	44	36	protein PRRC2C-like
LOC100544203	37	33	49	48	66	36	ATP-dependent DNA helicase Q5
PPP1R42	36	38	32	37	34	36	protein phosphatase 1, regulatory subunit 42
GMIP	47	26	43	39	42	36	glia maturation factor, beta
CYSLTR2	36	29	46	44	34	36	cysteinyl leukotriene receptor 1
HDC	80	53	59	60	70	36	histone deacetylase 9
SERTM1	40	34	55	30	35	36	serine-rich and transmembrane domain containing 1
LOC104912533	31	41	29	25	32	36	uncharacterized LOC104912533
LOC104913254	34	48	37	35	30	36	uncharacterized LOC104913254
C21H17orf97	59	64	37	84	83	36	chromosome 21 open reading frame, human C17orf85
LOC104915686	56	42	38	56	43	36	histone-lysine N-methyltransferase 2D-like
LOC104916941	52	27	21	22	23	36	TERF1-interacting nuclear factor 2-like
DZIP1L	51	22	49	33	54	36	DAZ interacting zinc finger protein 1
LOC678666	44	23	50	35	39	36	insulin-like growth factor I
LOC104911850	39	48	36	31	36	36	nck-associated protein 5-like
LOC100546123	17	33	17	25	8	36	serine/threonine-protein kinase Sgk2-like
LOC104911463	41	31	44	40	40	36	neurabin-1-like
LOC104909956	56	49	40	47	53	36	CUB and sushi multiple domains 1
CBLN2	37	32	43	28	35	36	cerebellin 1 precursor
LOC104911378	35	29	40	34	49	36	uncharacterized LOC104911378
LOC104914643	30	38	31	48	47	36	thaicobrin-like
LRRC4	64	35	38	33	44	36	leucine rich repeat containing 4
KCNE3							
RNF212B	26	35	30	31	36	36	potassium voltage-gated channel, Isk-related family, member 2
FBXO48	50	42	66	31	45	36	ring finger protein 212B
CAMK4	25	51	32	60	32	36	F-box protein 47
LOC104912985	74	39	89	34	55	36	calcium/calmodulin-dependent protein kinase II gamma
LOC100539483	20	32	14	37	21	36	uncharacterized LOC104912985
LOC104915182	43	39	42	30	32	36	WD repeat-containing protein 81-like
LOC104916947	31	33	41	33	32	36	uncharacterized LOC104915182
MORN3	25	29	21	50	20	36	uncharacterized LOC104916947
PCDH10	31	36	29	30	31	36	MORN repeat containing 3
LOC104914240	28	33	31	28	22	36	protocadherin 10
LOC104916984	40	55	35	40	45	36	disintegrin and metalloproteinase domain-containing protein 32-like
RELT	39	34	34	32	29	36	rho GTPase-activating protein 39-like
LOC104911439	66	30	59	21	43	36	RELT tumor necrosis factor receptor
LOC100547620	40	28	44	45	51	36	signal transducing adapter molecule 1
OPRM1	38	22	26	32	30	36	uncharacterized LOC100547618
LOC104911538	31	42	33	27	24	36	opioid receptor, mu 1
LOC104911341	95	44	89	25	76	36	uncharacterized LOC104911538
LOC104912681	32	37	35	34	52	36	uncharacterized LOC104911341
PDE1B	26	24	30	28	28	36	transmembrane and TPR repeat-containing protein 2 pseudogene
DOK2	23	32	26	48	35	36	phosphodiesterase 1B, calmodulin-dependent
LOC104911099	36	22	47	26	50	36	docking protein 1, 62kDa (downstream of tyrosine kinase 1)
NATD1	38	36	40	47	42	36	uncharacterized LOC104911099
SH2D4A	19	40	23	45	32	36	N-acetyltransferase domain containing 1
REPS2	58	32	47	30	44	36	SH2 domain containing 4A
LOC104917493	41	39	47	41	30	36	RALBP1 associated Eps domain containing 2
BEGAIN	45	27	34	24	34	36	uncharacterized LOC104917493
LOC104910743	27	46	17	58	40	35	brain-enriched guanylate kinase-associated
LOC104915522	45	26	35	33	43	35	toll-like receptor 2
LOC104910914	32	26	28	20	27	35	uncharacterized LOC104915522
LOC104909559	37	25	42	34	42	35	catenin alpha-2-like
LOC104913269	34	29	41	38	28	35	serine/threonine-protein kinase MRCK alpha-like
ADAM8	33	30	35	32	32	35	uncharacterized LOC104913269
ITGB6	55	23	27	17	44	35	ADAM metalloproteinase domain 8
MCTP2	37	45	32	30	28	35	integrin, beta 5
LOC104917487	62	39	61	34	49	35	multiple C2 domains, transmembrane 2
INPP5J	34	27	29	28	26	35	SRSF protein kinase 2-like
LOC104909532	49	45	45	43	37	35	inositol polyphosphate-5-phosphatase F
SLC37A2	18	16	18	24	35	35	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase beta-1-like
LOC104913796	38	33	36	31	44	35	solute carrier family 37 (glucose-6-phosphate transporter), member 2
ABCG1	99	82	62	67	71	35	uncharacterized LOC104913796
MCMDC2	40	31	25	42	50	35	ATP-binding cassette, sub-family G (WHITE), member 1
SPO11	58	40	47	36	50	35	minichromosome maintenance domain containing 2
ESRRB	51	32	49	22	19	35	SPO11 meiotic protein covalently bound to DSB
LOC100544530	34	39	34	32	36	35	epithelial splicing regulatory protein 2
LOC100545512	30	33	27	34	28	35	mothers against decapentaplegic homolog 2
	31	29	28	28	31	35	fibrinogen-like protein 1

MAP3K13	54	35	36	33	32	35	mitogen-activated protein kinase kinase kinase 13
TUSC3	20	39	30	33	24	35	tumor suppressor candidate 3
LOC104911898	45	30	47	47	33	35	serine-rich coiled-coil domain-containing protein 2-like
LOC100541494	32	38	31	30	35	35	feather keratin 1-like
PTPRR	43	42	37	36	39	35	protein tyrosine phosphatase, receptor type, R
CECR6	42	30	32	28	25	35	cat eye syndrome chromosome region, candidate 5
LOC100544917	23	30	33	39	36	35	erythroid differentiation-related factor 1
TFPI							tissue factor pathway inhibitor (lipoprotein-associated coagulation inhibitor)
	31	37	30	30	29	35	
LOC104913665	45	43	41	41	43	35	uncharacterized LOC104913665
MDH1B	30	25	34	30	21	35	malate dehydrogenase 1B, NAD (soluble)
CD7	31	34	36	40	33	35	CD63 molecule
LOC104911645	28	45	36	42	33	35	uncharacterized LOC104911645
LOC104917425	28	39	34	39	44	35	ATP-binding cassette sub-family D member 2-like
LOC104915356	49	53	55	43	51	35	aminopeptidase Q-like
LOC104915546	15	26	27	24	18	35	kinesin-like protein KIF1B
RFESD	47	37	23	58	43	35	Rieske (Fe-S) domain containing
ANKS1B	36	40	31	48	43	35	ankyrin repeat and sterile alpha motif domain containing 1B
SSTR2	60	68	49	87	38	35	somatostatin receptor 2
LOC100549268	27	30	22	44	50	35	uncharacterized LOC100549268
LOC104911217	21	38	22	38	39	35	uncharacterized LOC104911217
BCO1	38	32	33	29	59	35	beta-carotene oxygenase 1
LOC104913740	63	48	74	57	71	35	uncharacterized LOC104913740
RGS13	35	29	49	29	35	35	regulator of G-protein signaling 13
LOC104914629	28	21	24	21	26	35	zinc finger protein 385A-like
LOC104913106	29	26	37	30	32	35	protein kinase C delta type-like
LOC100548266							
	34	26	36	24	17	35	disintegrin and metalloproteinase domain-containing protein 18-like
YPEL4	46	51	38	38	34	35	yippee-like 4 (Drosophila)
LOC104915734	126	69	40	82	146	35	zinc finger protein 532-like
LOC104911778	51	42	41	36	45	35	mitogen-activated protein kinase kinase kinase MLT-like
LOC104911135	31	41	32	29	29	35	uncharacterized LOC104911135
LOC100546493	43	45	40	46	34	35	tubby-related protein 4-like
HTR1B							
	40	56	32	46	50	35	5-hydroxytryptamine (serotonin) receptor 1A, G protein-coupled
LOC104916083	28	36	39	34	37	35	EGF-containing fibulin-like extracellular matrix protein 2
ADRA2A	62	51	59	52	53	35	adrenoceptor alpha 2A
LOC104915898							
	38	39	38	40	40	35	amyloid beta A4 precursor protein-binding family B member 1-like
DMRT2	59	43	38	40	23	35	doublesex and mab-3 related transcription factor 1
ZFPM1	81	27	55	34	36	35	zinc finger protein, FOG family member 1
LOC104913426	40	33	43	41	31	35	uncharacterized LOC104913426
ZP1	31	18	44	21	36	35	zona pellucida glycoprotein 1 (sperm receptor)
ICA1	40	38	43	33	37	35	inhibitor of Bruton agammaglobulinemia tyrosine kinase
LOC104915506	57	39	49	38	44	34	protocadherin gamma-A5-like
LOC104911392	44	46	35	50	34	34	6-methylsalicylic acid synthase-like
PALM2	20	21	22	33	25	34	paralemm 2
LOC104909290	35	35	35	35	28	34	E3 ubiquitin-protein ligase TRIM33-like
LOC104910318	49	29	40	29	30	34	uncharacterized LOC104910318
LOC100543675	42	37	53	42	31	34	prolactin-releasing peptide-like
KIAA1324	45	27	35	29	31	34	KIAA1279 ortholog
LOC104912131	39	21	35	31	33	34	uncharacterized LOC104912131
LOC104913166	125	42	96	27	43	34	uncharacterized LOC104913166
LOC104914491	28	34	39	19	25	34	uncharacterized LOC104914491
LOC104912257	26	26	23	22	19	34	retinal-specific ATP-binding cassette transporter-like
LOC100539082	31	30	28	27	24	34	transcription factor 4-like
LOC104911630	36	26	33	33	30	34	transcription intermediary factor 1-alpha-like
LOC104913921	22	31	19	25	20	34	uncharacterized LOC104913921
LOC104912900	48	34	39	39	33	34	ras GTPase-activating-like protein IQGAP1
PKP3	39	40	30	31	27	34	plakophilin 3
LOC104912590	43	38	52	50	56	34	fibulin-1-like
LOC104910307	34	36	42	40	32	34	uncharacterized LOC104910307
ANKRD31	24	21	33	25	20	34	ankyrin repeat domain 31
MEF2B	36	26	42	18	43	34	myocyte enhancer factor 2B
KCTD8	38	32	31	38	26	34	potassium channel tetramerization domain containing 7
LOC104913045	32	34	29	36	41	34	WW domain-containing oxidoreductase-like
VAT1L	42	37	36	32	34	34	vesicle amine transport 1-like
LOC104915121	28	25	24	36	34	34	protein patched homolog 1-like
DNAH10	32	31	27	42	31	34	dynein, axonemal, heavy chain 1
TTC12	31	40	27	31	26	34	tetratricopeptide repeat domain 12
LRFN1							
	57	29	45	33	37	34	leucine rich repeat and fibronectin type III domain containing 1
LOC100550524	39	49	37	42	37	34	mucosal pentraxin-like
LOC104915640	39	86	14	71	17	34	uncharacterized protein KIAA1755 homolog
RDH5	32	36	37	33	44	34	retinol dehydrogenase 5 (11-cis/9-cis)
LOC104914283	44	35	34	33	40	34	stromal membrane-associated protein 2-like
LOC104911334	23	16	30	26	33	34	uncharacterized LOC104911334
LOC104914003	36	19	22	26	24	34	uncharacterized LOC104914003
LOC100549351	41	27	33	34	29	34	gap junction beta-6 protein

LOC104914044	47	25	42	24	40	34	extracellular sulfatase Sulf-2-like
LOC100547473	36	27	30	33	21	34	metastasis suppressor protein 1
PDE3A	39	30	29	40	36	34	phosphodiesterase 3A, cGMP-inhibited
LOC104913827	43	41	34	29	31	34	uncharacterized LOC104913827
CGN	31	43	44	29	34	34	CGG triplet repeat binding protein 1
LOC100543754	36	20	42	51	41	34	poly [ADP-ribose] polymerase 12-like
SDR42E1	54	36	41	36	36	34	short chain dehydrogenase/reductase family 42E, member 1
LOC104915300	22	23	27	29	22	34	uncharacterized LOC104915300
LOC104915894	30	34	29	31	28	34	transcription factor COE1-like
NEK3	38	25	38	20	35	34	NIMA-related kinase 3
LOC104911338	53	31	64	52	69	34	GTPase IMAP family member 8-like
LOC104910201	29	32	29	22	20	34	ankyrin repeat and SAM domain-containing protein 6-like
LOC104912852	25	32	14	39	36	34	uncharacterized LOC104912852
FBLN7	36	66	42	41	60	34	fibulin 5
LOC104916462	22	19	20	22	23	34	CCAAT/enhancer-binding protein alpha-like
ELOVL7	35	31	24	30	23	34	ELOVL fatty acid elongase 6
CCDC148	11	30	35	60	30	34	coiled-coil domain containing 142
ELFN1	29	32	26	29	44	34	E74-like factor 5 (ets domain transcription factor)
LOC100550693	7	48	4	49	10	34	glycine receptor subunit alpha-3
AKNAD1	45	30	42	29	38	34	AKNA domain containing 1
LOC104917326	38	20	28	20	35	34	adenylyltransferase and sulfurtransferase MOC53-like
SPNS3	59	40	52	56	65	34	spinster homolog 3 (Drosophila)
C1H12orf75	36	32	36	31	23	34	chromosome 1 open reading frame, human C12orf73
LOC104909853	38	30	28	33	40	34	uncharacterized LOC104909853
TMCC3	60	53	46	42	30	34	transmembrane and coiled-coil domain family 3
LOC104911569	13	30	19	20	9	34	uncharacterized LOC104911569
LOC104911213	29	41	13	19	9	34	uncharacterized LOC104911213
RASSF5	48	28	49	29	49	34	Ras association (RalGDS/AF-6) domain family member 5
LOC100546837	71	40	55	48	41	34	fructose-1,6-bisphosphatase isozyme 2
LOC100546025	35	46	44	44	42	34	protein CBFA2T3
LOC104910947	57	50	44	50	53	33	sn1-specific diacylglycerol lipase alpha-like
MREG	33	25	23	22	32	33	melanoregulin
LOC100548965	38	35	31	31	26	33	dual specificity testis-specific protein kinase 2
LOC104911010	31	30	41	22	28	33	uncharacterized LOC104911010
LOC100550280	55	39	42	39	66	33	low-density lipoprotein receptor-related protein 2-like
BEND4	42	34	42	29	29	33	BEN domain containing 4
DAB1	48	26	55	31	44	33	dishevelled associated activator of morphogenesis 1
PRDM16	47	57	48	45	41	33	PR domain containing 16
LOC104916661	36	33	49	44	52	33	proprotein convertase subtilisin/kexin type 5-like
LOC100547499	48	28	45	34	57	33	nuclear envelope pore membrane protein POM 121C
LOC104914392	18	34	27	28	41	33	myotubularin-related protein 11-like
MGMT	51	28	44	27	36	33	O-6-methylguanine-DNA methyltransferase
LINGO2	75	27	61	23	20	33	leucine rich repeat and Ig domain containing 1
LOC104912532	39	27	33	29	50	33	carboxypeptidase N subunit 2-like
ABCG5	32	36	36	36	34	33	ATP-binding cassette, sub-family G (WHITE), member 5
LOC104916532	46	28	46	42	30	33	zinc finger CCH domain-containing protein 4-like
NCKAP5	55	45	46	44	35	33	NCK-associated protein 5
LOC104917605	26	23	26	29	29	33	serine/threonine-protein kinase LATS2-like
ADRB1	52	40	42	43	55	33	adrenoceptor beta 1
LOC104915841	31	31	40	36	43	33	chromosome unknown open reading frame, human C7orf43
LOC104909859	77	33	62	21	61	33	absent in melanoma 1
LOC100548578	46	53	45	63	33	33	noggin-1-like
LOC104914228	45	26	31	31	27	33	transcription factor COE2-like
PDCL2	27	32	33	34	33	33	phosducin-like 2
LOC100550234	31	31	34	32	42	33	transmembrane protein 68
TIFA	36	40	42	48	44	33	TRAF-interacting protein with forkhead-associated domain
PPP1R17	14	38	24	37	30	33	protein phosphatase 1, regulatory subunit 17
LOC104914376	30	33	30	30	26	33	AT-rich interactive domain-containing protein 1A-like
LOC104909687	21	35	20	19	12	33	uncharacterized LOC104909687
LOC100541378	41	38	39	26	14	33	G protein-coupled receptor kinase 3
LOC104909433	28	19	30	19	29	33	uncharacterized LOC104909433
MEIS2	34	28	32	29	27	33	Meis homeobox 2
LOC104915017	33	28	40	38	27	33	lysine-specific demethylase 4C-like
TOMM5	32	23	32	22	26	33	translocase of outer mitochondrial membrane 5 homolog (yeast)
LOC100538454	28	31	46	21	19	33	ephrin-A2-like
LOC100539130	43	20	29	21	32	33	cell surface glycoprotein CD200 receptor 1-A-like
LOC100542626	45	24	28	33	26	33	son of sevenless homolog 1
LOC104913756	34	28	27	25	28	33	uncharacterized LOC104913756
LOC104914473	52	39	44	37	50	33	uncharacterized LOC104914473
SYN2	35	56	47	48	63	33	synapsin II
LOC104910749	43	32	35	37	36	33	uncharacterized LOC104910749
LOC104917009	43	31	29	41	43	33	mitogen-activated protein kinase kinase kinase 12-like
LOC100541291	44	27	53	43	53	33	cytosolic 5'-nucleotidase 18-like
LOC104912121	45	40	47	53	49	33	BCL-6 corepressor-like protein 1
LOC100542515	42	28	35	28	23	33	S-adenosylmethionine synthase isoform type-2-like
LOC100542901	41	29	50	31	33	33	trace amine-associated receptor 1
LOC104916299	34	30	39	33	43	33	sprT-like domain-containing protein Spartan

DAO	31	42	36	40	38	33	DALR anticodon binding domain containing 3
ARL11	54	33	51	32	35	33	ADP-ribosylation factor-like 11
LOC104911638	39	24	42	24	30	33	UPF0606 protein KIAA1549-like
LOC100541297	42	33	36	35	56	33	glutamate receptor ionotropic, delta-2-like
BEST1	28	25	32	32	35	32	bestrophin 1
LOC104909477	29	32	33	32	42	32	uncharacterized LOC104909477
LOC100543214	49	39	53	38	41	32	RNA polymerase-associated protein CTR9 homolog
ASPG	42	33	36	23	22	32	asparaginase
LOC104909282	12	38	22	54	23	32	uncharacterized LOC104909282
LOC104911901	17	36	20	54	33	32	uncharacterized LOC104911901
LOC104911502	42	26	29	30	32	32	TBC1 domain family member 5-like
LOC104917462	57	29	36	33	24	32	conserved oligomeric Golgi complex subunit 5-like
EMID1	46	38	51	36	54	32	EMG1 N1-specific pseudouridine methyltransferase
LOC104910481	29	33	33	31	36	32	trafficking protein particle complex subunit 9-like
MOGAT1	21	27	19	32	34	32	monoacylglycerol O-acyltransferase 1
TMEM136	41	27	40	28	21	32	transmembrane protein 136
LOC100543441	23	39	24	26	31	32	feather keratin 2-like
LITAF	28	19	27	30	32	32	lipoyltransferase 1
ID4							
	48	31	35	18	41	32	inhibitor of DNA binding 3, dominant negative helix-loop-helix protein
LOC104910172	42	35	48	38	35	32	uncharacterized LOC104910172
LOC104917539	18	26	19	11	14	32	uncharacterized LOC104917539
LOC104915979	36	47	36	38	31	32	uncharacterized LOC104915979
PADI2	22	51	36	36	49	32	peptidyl arginine deiminase, type II
PCDH17	84	26	63	25	46	32	protocadherin 17
LOC104916885	50	40	45	47	37	32	ras GTPase-activating-like protein IQGAP3
LOC104910353	36	21	25	29	30	32	uncharacterized LOC104910353
LOC104917232	34	25	37	32	28	32	alpha-mannosidase 2-like
LOC100546330	59	31	65	34	56	32	snRNA-activating protein complex subunit 3-like
WNT11	22	17	30	14	10	32	wingless-type MMTV integration site family, member 11
ATP2C2	39	29	45	35	41	32	ATPase, Ca++ transporting, type 2C, member 2
LOC104916668	30	27	23	22	22	32	retinol dehydrogenase 7-like
LOC104916222	25	27	16	23	18	32	uncharacterized protein YBL113C-like
LOC104916511	29	27	39	29	30	32	uncharacterized LOC104916511
LOC104916940	51	31	44	34	45	32	diacylglycerol kinase alpha-like
CPNE8	50	45	37	44	30	32	copine VII
LOC104910256	48	45	48	35	37	32	receptor-type tyrosine-protein phosphatase mu-like
LOC104909200	32	20	30	32	30	32	interferon-induced guanylate-binding protein 1-like
LOC104915002	33	29	26	38	24	32	transcription factor RFX3-like
TEX12	71	42	78	50	45	32	testis expressed 12
LOC104911781	50	29	42	29	24	32	N-chimaerin-like
RPH3A	27	35	24	35	18	32	rabphilin 3A
LOC100538446	26	28	32	31	32	32	calcitonin gene-related peptide type 1 receptor-like
DIO3	37	27	38	20	26	32	deiodinase, iodothyronine, type II
GPR149	28	28	38	28	24	32	G protein-coupled receptor 148
LOC104915541	35	30	30	22	34	32	uncharacterized LOC104915541
MGAT5B							
	33	26	30	24	28	32	mannosyl (alpha-1,6-)-glycoprotein beta-1,6-N-acetyl-
MMRN1	42	75	42	51	67	32	glucosaminyltransferase, isozyme B
TMEM35	48	34	37	28	55	32	multimerin 1
TNFSF4	31	31	35	27	40	32	transmembrane protein 35
DNALI1	43	39	51	38	38	32	tumor necrosis factor (ligand) superfamily, member 4
SLC25A47	23	19	30	25	26	32	dynein, axonemal, light chain 4
NHLH1	39	37	35	34	22	32	solute carrier family 25, member 47
IKZF1							nescient helix loop helix 1
	46	22	33	40	43	32	inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase
LNK1	40	41	37	32	31	31	epsilon
LOC104911340	43	27	51	32	36	31	leucyl/cystinyl aminopeptidase
ANKRD61	32	37	47	28	50	31	uncharacterized LOC104911340
LOC104909979	33	23	34	28	46	31	ankyrin repeat domain 61
COL8A2	18	48	35	26	31	31	phosphatidate phosphatase LPIN1-like
GDF10	31	52	39	47	50	31	collagen, type VIII, alpha 1
LOC104913337	36	27	29	23	32	31	growth differentiation factor 1
LOC104916425							folliculin-related protein 4-like
	50	30	45	33	39	31	potassium voltage-gated channel subfamily C member 3-like
PACRGL	15	21	16	20	22	31	PARK2 co-regulated-like
CBX7	40	35	35	39	30	31	chromobox homolog 4
CHRNB4	35	28	57	33	34	31	cholinergic receptor, nicotinic, beta 3 (neuronal)
SYT1	33	41	29	30	22	31	synaptotagmin I
N4BP2L1	40	31	39	34	40	31	NEDD4 binding protein 2-like 1
LOC104914027							
	38	27	35	31	32	31	potassium voltage-gated channel subfamily KQT member 2-like
CYP3A80	42	20	28	18	33	31	cytochrome P450 3A37
LOC104910674	28	30	32	40	39	31	electrogenic sodium bicarbonate cotransporter 1-like
LOC104917075	39	34	34	32	41	31	zinc finger protein 501-like
LOC104912098	40	31	36	29	27	31	uncharacterized LOC104912098
LOC104911790	15	20	23	25	32	31	uncharacterized LOC104911790
DPYSL5	83	25	63	29	32	31	dihydropyrimidinase-like 4
RGS20	37	30	26	24	34	31	regulator of G-protein signaling 20

DLK2	31	27	38	35	35	31	delta-like 1 homolog (Drosophila)
LOC104914063	28	34	31	31	24	31	uncharacterized LOC104914063
BAMBI	35	35	38	29	36	31	BMP and activin membrane-bound inhibitor
LOC104912355	41	35	45	34	29	31	rab GTPase-activating protein 1-like
LOC104916058	42	41	32	40	32	31	uncharacterized LOC104916058
LOC100539391	32	36	37	30	26	31	transcription factor SOX-5
KCNMB2							potassium large conductance calcium-activated channel, subfamily M, beta member 1
LOC104916932	13	37	21	14	26	31	NAD-dependent malic enzyme, mitochondrial-like
LOC104914292	96	43	43	41	97	31	uncharacterized LOC104914292
LOC104910129	32	33	36	26	27	31	ovalbumin-related protein X
HSF5	30	25	31	31	46	31	heat shock transcription factor 4
SYT6	29	31	32	23	29	31	synaptotagmin VI
LOC104913366	20	45	33	35	29	31	4-aminobutyrate aminotransferase, mitochondrial-like
TTC16	48	20	30	30	32	31	tetratricopeptide repeat domain 16
CSH14orf180	29	31	26	31	37	31	chromosome 5 open reading frame, human C14orf169
LOC104915519	71	58	56	37	50	31	myelin-oligodendrocyte glycoprotein-like
LOC104909459	12	33	7	44	2	31	proteasome activator complex subunit 4-like
IGDCC3	30	22	24	33	24	31	immunoglobulin (CD79A) binding protein 1
DBX2	40	35	29	37	36	31	developing brain homeobox 1
LOC104915051	26	30	28	27	19	31	focadhesin-like
LOC104914622	28	18	29	18	22	31	uncharacterized LOC104914622
LOC104916972	24	31	30	11	25	31	RNA-binding protein 4 pseudogene
TMEM51	32	25	24	21	25	31	transmembrane protein 51
LOC104916459	41	35	34	26	42	31	mucin-5AC-like
RIMS4	27	31	37	30	21	31	regulating synaptic membrane exocytosis 4
LOC100541754	38	26	43	47	50	31	V-set and transmembrane domain-containing protein 1-like
LOC100548027	40	25	40	34	30	31	myelin transcription factor 1-like protein
LOC104913913	89	72	57	49	48	31	uncharacterized LOC104913913
LOC100547159	19	27	28	32	19	31	glycogen phosphorylase, brain form
LOC104911926	43	24	38	26	34	31	chromosome 8 C10orf107 homolog
LOC104915846	59	28	49	38	45	31	arf-GAP with Rho-GAP domain, ANK repeat and PH domain-containing protein 1-like
LOC104913564	27	24	22	27	21	31	uncharacterized LOC104913564
LOC104914459	23	24	25	24	18	31	uncharacterized LOC104914459
LOC104912083	23	28	34	27	30	31	dedicator of cytokinesis protein 1-like
MEST	40	31	33	34	34	31	mesoderm specific transcript
LOC104909959	42	35	33	33	46	31	angiopoietin-2-like
RASL11A	31	25	23	31	35	31	RAS-like, family 11, member A
LOC104909284	37	38	34	31	46	31	protein fantom-like
LOC104913047	26	24	31	34	31	30	A disintegrin and metalloproteinase with thrombospondin motifs 18-like
LOC104916677	32	28	33	30	25	30	uncharacterized LOC104916677
MST1R	43	41	30	47	26	30	macrophage stimulating 1 receptor (c-met-related tyrosine kinase)
LOC104913737	31	28	31	41	34	30	uncharacterized LOC104913737
LOC104913895	23	16	22	19	20	30	laminin subunit beta-4-like
OCSTAMP	31	21	37	25	32	30	osteoclast stimulatory transmembrane protein
NUP210L	36	39	39	28	28	30	nucleoporin 210kDa-like
LOC104915787	31	33	33	25	31	30	oxysterol-binding protein-related protein 7-like
LOC104914004	32	36	35	30	36	30	uncharacterized LOC104914004
LOC104913987	26	24	23	27	35	30	uncharacterized LOC104913987
BLNK	41	39	46	30	38	30	B-cell linker
CACNA2D3	40	22	25	27	22	30	calcium channel, voltage-dependent, alpha 2/delta subunit 2
TP73	29	29	28	24	18	30	tumor protein p73
LOC100539718	22	18	18	18	18	30	LON peptidase N-terminal domain and RING finger protein 1-like
CLDN19	18	22	18	31	14	30	claudin 18
AHSG	33	61	36	39	33	30	alpha-2-HS-glycoprotein
LOC100540851	21	19	24	26	10	30	zinc finger protein 208-like
LOC100540961	29	28	31	35	35	30	6-methylsalicylic acid synthase-like
LOC100543342	45	18	31	15	23	30	D(1) dopamine receptor-like
LOC104909935	33	42	26	33	28	30	rho guanine nucleotide exchange factor 10-like
LOC104912044	31	28	32	31	27	30	NHL repeat-containing protein 2-like
LOC104914898	26	25	32	29	27	30	mitogen-activated protein kinase kinase kinase 1
LOC104915240	38	20	30	33	13	30	solute carrier family 12 member 2
LOC104911709	49	24	39	27	23	30	sodium channel protein type 2 subunit alpha-like
LOC104912252	59	23	49	25	59	30	uncharacterized LOC104912252
LOC104910876	38	36	28	33	20	30	VPS10 domain-containing receptor SorCS2-like
PI3	29	28	34	30	24	30	peptidase inhibitor 3, skin-derived
NXNL2	40	19	30	90	35	30	nucleoredoxin-like 2
LOC104913117	28	25	28	35	39	30	uncharacterized LOC104913117
LOC104914878	26	20	23	14	17	30	integrin alpha-1-like
LOC104910241	29	25	29	31	28	30	rotatin-like
LOC104916351	30	19	32	26	17	30	zinc finger CCCH domain-containing protein 4-like
LOC100549810	21	22	23	24	21	30	RING finger protein 145-like
LOC100545461	26	23	22	28	15	30	metabotropic glutamate receptor 4-like
LOC104915400	34	25	38	22	44	30	PR domain zinc finger protein 15-like
	27	19	25	19	20	30	

LOC100540641	14	22	15	34	17	30	exocyst complex component 1
LOC104916386	53	42	41	42	36	30	integrin alpha-3-like
NFATC2							
	31	37	43	37	29	30	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2
FGF22	33	24	31	26	34	30	fibroblast growth factor 20
LOC104911404	30	23	21	25	25	30	uncharacterized LOC104911404
LOC104914197	29	35	25	28	24	30	uncharacterized LOC104914197
LOC104910756	14	24	24	22	22	30	uncharacterized LOC104910756
LOC104911351							
	38	31	36	25	32	30	phosphoribosyltransferase domain-containing protein 1-like
LOC104909776	55	29	49	41	33	30	rho GTPase-activating protein 18-like
LOC104913425	29	20	31	27	28	30	caspase recruitment domain-containing protein 11-like
LOC104913536	51	33	45	34	40	30	uncharacterized LOC104913536
SUSD1	39	31	34	32	27	30	sushi domain containing 1
LOC104916029	32	28	24	19	26	30	CDK5 regulatory subunit-associated protein 3-like
LOC100548799							
	41	22	35	23	18	30	membrane-bound O-acyltransferase domain-containing protein 2-like
LOC104912544	28	26	28	32	29	30	uncharacterized LOC104912544
LOC104912686	23	35	26	33	24	30	AF4/FMR2 family member 3-like
YBEY	38	18	35	22	32	30	ybeY metalloproteinase (putative)
HOXD4	31	19	26	18	25	30	homeobox D12
LOC104913294	23	28	26	25	24	30	uncharacterized LOC104913294
ALDOB	70	76	22	156	23	29	aldolase B, fructose-bisphosphate
LOC100540178	33	44	26	42	29	29	probable E3 ubiquitin-protein ligase MID2
PLCXD1							
	18	17	15	22	13	29	phosphatidylinositol-specific phospholipase C, X domain containing 1
NRXN3	17	37	31	47	37	29	neurexin 3
KCNE2							
	22	21	17	22	11	29	potassium voltage-gated channel, Isk-related family, member 1
LOC104913554	26	22	32	31	21	29	breakpoint cluster region protein-like
SYNPR	29	45	34	32	23	29	synaptopodin
LOC104913501	32	24	22	34	30	29	uncharacterized LOC104913501
LOC100540406	36	21	42	33	33	29	hepatocyte nuclear factor 4-beta-like
LOC104914582	33	31	32	26	38	29	GTPase IMAP family member 1-like
TSPAN32	68	23	25	39	60	29	tetraspanin 32
SLC29A3							
	33	30	29	27	28	29	solute carrier family 29 (equilibrative nucleoside transporter), member 3
SH3BGR1	34	20	35	23	41	29	SH3 domain binding glutamate-rich protein like 2
WISP3	33	29	42	29	35	29	WNT1 inducible signaling pathway protein 3
LOC104913678	22	19	26	30	41	29	uncharacterized LOC104913678
LOC104914976	22	16	25	20	21	29	putative ankyrin repeat domain-containing protein 31
LOC104915664	39	22	40	28	33	29	tubulin alpha chain-like
LOC104913100	43	33	40	32	39	29	uncharacterized LOC104913100
IL17RE	39	43	29	29	35	29	interleukin 17 receptor D
DGAT2	30	44	27	46	39	29	deafness, autosomal recessive 59
LAMA1	72	37	68	31	40	29	lymphocyte-activation gene 3
LOC100550455	29	28	45	42	31	29	monocarboxylate transporter 2-like
LOC104917315	15	38	25	25	22	29	spore wall protein 2-like
ARL6	43	29	37	35	29	29	ADP-ribosylation factor-like 6
MELK	12	21	13	27	11	29	maternal embryonic leucine zipper kinase
LOC104917450	29	12	36	16	22	29	laminin subunit beta-4-like
LOC100538445	26	31	34	27	18	29	glutathione S-transferase theta-1-like
CDH20	43	42	47	49	41	29	cadherin 2, type 1, N-cadherin (neuronal)
LOC104917357	38	14	29	21	31	29	plexin-D1-like
SLC6A15							
	38	10	27	11	25	29	solute carrier family 6 (neutral amino acid transporter), member 15
LOC104912859	63	25	34	21	37	29	uncharacterized LOC104912859
COPRS	33	26	23	25	28	29	coatamer protein complex, subunit gamma 2
LOC104911047	40	30	32	22	24	29	uncharacterized LOC104911047
HAND2	20	29	25	18	31	29	heart and neural crest derivatives expressed 1
LOC104914565	51	33	53	42	37	29	uncharacterized LOC104914565
MEGF6	35	38	32	34	39	29	multiple EGF-like-domains 6
DOCK5	47	29	41	33	39	29	dedicator of cytokinesis 4
LOC104913241	27	62	44	38	27	29	uncharacterized LOC104913241
VWDE	13	18	16	16	8	29	von Willebrand factor D and EGF domains
PDZD3	25	24	29	28	20	29	PDZ domain containing 3
PEX5L	16	14	11	23	10	29	peroxisomal biogenesis factor 5-like
LOC104912125	31	26	22	31	23	29	lysine-specific demethylase 5A-like
LOC104913211	25	32	29	38	24	29	histone H100
LOC104912504	25	25	27	27	32	29	uncharacterized LOC104912504
KIF17	25	14	17	15	20	29	kinesin family member 16B
PROKR1	19	58	22	54	30	29	prokineticin receptor 1
GABRG2	11	17	16	41	47	29	gamma-aminobutyric acid (GABA) A receptor, gamma 1
LOC104911963	34	34	25	41	34	29	FYVE, RhoGEF and PH domain-containing protein 4-like
SULT6B1	23	26	25	21	27	29	sulfotransferase family, cytosolic, 6B, member 1
LOC104914961	37	28	44	35	29	29	uncharacterized LOC104914961
LOC104915832	47	36	45	42	40	29	protocadherin gamma-B2-like
LOC104914201	41	27	33	40	45	29	alkaline phosphatase, tissue-nonspecific isozyme-like
GALNT9	17	17	27	18	14	29	polypeptide N-acetylgalactosaminyltransferase 7

LOC104912134	34	30	36	27	32	29	uncharacterized LOC104912134
IGSF10	36	52	42	34	29	29	immunoglobulin lambda-like polypeptide 1
LOC104914510	41	26	27	23	30	29	uncharacterized LOC104914510
LOC104913110	38	48	33	39	24	29	uncharacterized LOC104913110
LOC100546647	36	25	42	26	29	29	translocation protein SEC63 homolog
CACNB2	37	37	46	35	18	29	calcium channel, voltage-dependent, alpha 2/delta subunit 3
AZIN2	10	19	25	24	28	29	antizyme inhibitor 2
CCDC177	66	47	52	32	50	29	coiled-coil domain containing 176
TNFRSF1B	38	30	59	17	37	29	tumor necrosis factor receptor superfamily, member 1B
F2	28	29	34	27	34	29	coagulation factor XIII, A1 polypeptide
LOC100542562	23	12	26	13	12	28	protein-glutamine gamma-glutamyltransferase 6-like
LOC100540439	28	25	21	27	31	28	uncharacterized LOC100540438
BCAN	84	30	50	26	30	28	brevican
LOC104912423	10	21	15	28	27	28	inaD-like protein
LOC104912180	34	28	43	32	33	28	uncharacterized protein CXorf21 homolog
PTGS2	57	43	36	25	55	28	prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)
LOC100546899	32	18	37	25	22	28	serine palmitoyltransferase 3
LOC100547714	23	26	41	30	32	28	endoplasmic reticulum-Golgi intermediate compartment protein 2
LOC104912516	27	18	23	20	23	28	uncharacterized LOC104912516
LOC104916644	25	21	26	33	24	28	uncharacterized LOC104916644
LOC104915708	27	26	17	37	38	28	uncharacterized LOC104915708
IGSF5	61	25	58	31	37	28	immunoglobulin superfamily, member 3
LOC104913447	46	34	33	43	38	28	uncharacterized LOC104913447
LOC104909941	39	23	31	18	23	28	uncharacterized LOC104909941
LOC100549370	68	63	39	24	26	28	ribosomal biogenesis protein LAS1L-like
LOC100541957	31	32	27	35	33	28	hyaluronidase-1-like
LOC104909993	35	15	31	25	24	28	uncharacterized LOC104909993
LOC104916496	16	25	19	15	11	28	zinc finger protein 665-like
PRLR	23	32	47	35	20	28	prolactin receptor
NTN1	8	21	18	16	23	28	netrin 1
LOC104913922	44	38	83	43	87	28	lysophosphatidic acid receptor 1-B-like
LOC104912769	42	33	39	31	40	28	transcription factor 12-like
LOC104917329	40	30	42	34	44	28	protein FAM53B-like
LOC104915497	33	25	27	19	23	28	protein C19orf12 pseudogene
LOC104910982	22	27	27	22	19	28	uncharacterized LOC104910982
LOC100541041	17	22	20	22	21	28	lysocardiolipin acyltransferase 1-like
LOC100547680	31	3	26	15	27	28	rho-related GTP-binding protein RhoG-like
LOC104917513	30	23	34	30	22	28	ETS-related transcription factor Elf-1-like
RSPO3	47	48	66	35	22	28	R-spondin 3
PTGR1	32	26	31	20	38	28	prostaglandin reductase 1
GABRD	31	27	36	24	21	28	gamma-aminobutyric acid (GABA) A receptor, beta 3
LOC104910571	39	28	33	34	27	28	sodium channel and clathrin linker 1-like
LOC100544614	58	37	44	32	29	28	placenta-specific gene 8 protein-like
LOC104910652	24	18	28	23	27	28	rho guanine nucleotide exchange factor 38-like
SLC7A11	12	17	24	6	9	28	solute carrier family 7 (anionic amino acid transporter light chain, xc-system), member 11
LOC104914684	28	24	27	23	21	28	protein ENL-like
SPACA1	24	27	21	12	16	28	sperm acrosome associated 1
LOC104917474	26	26	21	33	17	28	uncharacterized LOC104917474
LOC104912449	28	22	27	30	26	28	oxysterol-binding protein-related protein 9-like
LOC104910724	28	17	17	11	16	28	uncharacterized LOC104910724
LOC104910207	22	24	13	37	14	28	dynein heavy chain 8, axonemal-like
LOC100545266	31	28	38	24	26	28	zinc finger protein 664-like
ABI3	39	27	35	32	21	28	ABI family, member 3
A2M	18	37	29	24	17	28	alpha-2-macroglobulin
BRINP3	34	27	30	26	37	28	bone morphogenetic protein/retinoic acid inducible neural-specific 2
LOC104910242	30	15	26	18	15	28	rotatin-like
KLHL14	26	30	33	30	35	28	kelch-like family member 13
LEFTY1	39	24	31	24	36	28	lymphoid enhancer-binding factor 1
NOX4	17	18	29	22	27	28	NADPH oxidase 4
LOC100303681	23	36	42	34	31	28	hemoglobin subunit pi
TBPL2	137	92	136	85	87	28	TATA box binding protein like 2
LOC100551216	17	15	18	61	30	28	interferon-induced protein with tetratricopeptide repeats 5-like
LOC104912916	18	23	23	23	23	28	fatty acyl-CoA hydrolase precursor, medium chain-like
KIAA1024	24	42	25	50	13	28	KIAA0930 ortholog
PKP2	38	36	34	22	16	28	plakophilin 2
SMCO3	53	23	17	46	51	28	single-pass membrane protein with coiled-coil domains 3
LOC104914031	28	31	27	10	9	28	uncharacterized LOC104914031
LOC104914214	23	14	19	21	17	28	uncharacterized LOC104914214
LOC104912299	34	21	36	20	31	28	uncharacterized LOC104912299
LOC100542236	33	34	28	26	35	28	E3 ubiquitin-protein ligase UBR3
SPP1	78	39	40	41	48	28	secreted phosphoprotein 1
PIANP	15	30	25	23	17	28	PILR alpha associated neural protein
C1QL1	26	31	29	27	23	28	complement component 1, q subcomponent, C chain

LOC104911150	33	23	30	20	27	28	diphthine--ammonia ligase-like
PPP1R10	28	27	28	33	26	28	protein phosphatase 1, regulatory subunit 10
LETMD1							
	23	20	21	26	17	28	leucine zipper-EF-hand containing transmembrane protein 2
LOC100545105	33	23	22	23	26	27	F-box/WD repeat-containing protein 7-like
LOC104911813	29	27	29	29	30	27	protein TANC1-like
LOC104915515	26	25	22	45	26	27	myelin-oligodendrocyte glycoprotein-like
EDN2	43	31	35	37	34	27	endothelin 1
EVA1A	35	31	27	31	29	27	ets variant 7
C19H9orf173	18	23	20	20	25	27	chromosome 19 open reading frame, human C9orf172
TMOD2	38	38	33	35	23	27	tropomodulin 2 (neuronal)
LOC104915828	35	28	23	23	33	27	piwi-like protein 2
LOC104912367	30	16	25	15	25	27	uncharacterized oxidoreductase ZK1290.5-like
LOC104910706	29	24	20	24	25	27	histone H2A-IV-like
LOC104916402	35	27	29	34	21	27	SWI/SNF complex subunit SMARCC2-like
APOA5	21	25	27	16	19	27	apolipoprotein A-V
SRRM4	35	19	26	14	38	27	serine/arginine repetitive matrix 4
LOC104911384	19	26	25	26	21	27	sickle tail protein homolog
FNDC4	37	43	29	34	30	27	fibronectin type III domain containing 3B
LOC104911087	24	25	31	21	20	27	spectrin beta chain, non-erythrocytic 4-like
LOC104909682	18	32	19	25	22	27	uncharacterized LOC104909682
LOC104909239	22	34	17	26	34	27	synaptotagmin-9
PROZ	27	18	23	14	19	27	protein Z, vitamin K-dependent plasma glycoprotein
TMEM255B	29	49	37	31	32	27	transmembrane protein 255B
LOC104916175	18	35	17	23	21	27	aquaporin-4-like
LOC104912101	42	32	41	32	32	27	uncharacterized LOC104912101
LOC100541078	23	27	17	27	15	27	ephrin type-A receptor 10
LOC104916229	23	20	25	20	19	27	transcription factor 4-like
NPY2R	33	45	33	38	34	27	neuropeptide Y receptor Y2
LOC104910997	22	31	36	25	34	27	uncharacterized LOC104910997
LOC104916850	29	19	30	33	27	27	uncharacterized LOC104916850
LOC104913900							
	5	29	7	32	30	27	endogenous retrovirus group K member 113 Gag polyprotein-like
LOC104913493							
	21	19	28	18	22	27	voltage-dependent T-type calcium channel subunit alpha-1H-like
LOC104912260	25	19	30	26	27	27	ATP-binding cassette sub-family D member 3-like
NPTX2	49	37	49	21	13	27	neuronal pentraxin II
LOC104917179	13	28	14	17	8	27	zinc finger protein 501-like
LOC104916327	26	25	17	19	21	27	semaphorin-6C-like
LOC100539909	34	26	29	34	24	27	amine sulfotransferase-like
LOC104914394	27	31	28	29	32	27	OTU domain-containing protein 7B-like
SPAG17	12	19	23	15	12	27	sperm associated antigen 17
LOC104912261	29	23	30	27	11	27	uncharacterized LOC104912261
SCN8A	29	33	27	37	38	27	sodium channel, voltage gated, type VIII, alpha subunit
TMEM132C	34	22	31	24	50	27	transmembrane protein 132C
COL9A2	47	278	76	34	32	27	collagen, type IX, alpha 1
LOC104917507	34	32	31	29	25	27	ecto-NOX disulfide-thiol exchanger 1-like
TEKT3	21	31	20	23	29	27	tektin 3
LOC104911702	25	22	23	27	28	27	dipeptidyl peptidase 4-like
SNCA	36	60	26	40	23	27	synuclein, alpha (non A4 component of amyloid precursor)
LOC104909768	38	31	33	23	36	27	uncharacterized LOC104909768
LOC100546655	30	22	25	21	25	27	uncharacterized LOC100546655
LOC104916085	53	46	33	38	41	27	maltase-glucoamylase, intestinal-like
LOC104910351	47	37	49	38	42	27	centrosome and spindle pole associated protein 1-like
LOC104913718	37	21	34	22	23	27	protein CIP2A homolog
EDNRB	38	38	40	30	26	27	endothelin receptor type A
LOC104915997	43	56	57	35	28	27	myosin tail region-interacting protein MT11-like
PPEF1	108	37	61	29	80	27	protein phosphatase, EF-hand calcium binding domain 1
LOC104910678	31	25	31	36	29	27	tankyrase-1-like
SPATA1	35	37	35	33	37	27	spermatogenesis associated 1
LOC104910972	32	38	32	39	50	26	uncharacterized LOC104910972
LOC104912116	29	26	36	35	26	26	serine/threonine-protein kinase WNK3-like
LOC104915239	47	24	33	28	29	26	solute carrier family 12 member 2
LOC104915995	31	29	23	20	18	26	uncharacterized LOC104915995
DOCK8	34	22	36	38	33	26	dedicator of cytokinesis 5
LOC104911379	26	19	25	16	41	26	uncharacterized LOC104911379
LOC104912374	33	28	25	32	18	26	protein crumbs homolog 1-like
RGS12	34	32	37	33	24	26	regulator of G-protein signaling 12
LOC104914635	42	40	47	40	50	26	ceramide synthase 4-like
PVALB	39	48	32	23	20	26	parvalbumin
LOC100547274	35	23	43	24	51	26	prolyl endopeptidase FAP
LOC104913695	24	30	32	39	26	26	uncharacterized LOC104913695
KEL	48	25	27	40	55	26	kelch-like ECH-associated protein 1
KIF19	11	19	27	18	27	26	kinesin family member 18B
DHH	23	41	28	28	33	26	dihydrofolate reductase
LOC104916952	19	24	24	26	28	26	gap junction delta-2 protein-like
PDE6G	37	20	24	28	29	26	phosphodiesterase 6G, cGMP-specific, rod, gamma
LOC104910799	29	26	32	26	31	26	toll-like receptor 6
LOC104913279	34	19	20	23	24	26	uncharacterized LOC104913279

PKIB	15	31	26	24	19	26	protein kinase (cAMP-dependent, catalytic) inhibitor beta
LOC104917491	32	31	37	32	28	26	reelin-like
LOC104913144	21	24	27	28	16	26	KIAA1257
ZNF536	22	33	32	33	33	26	zinc finger protein 536
ADRA1A	27	42	42	49	53	26	adrenoceptor alpha 1A
LOC104917365	31	30	32	30	33	26	polycomb group RING finger protein 6-like
CAPN13	22	26	16	14	30	26	calpain 11
LOC104915895	19	34	23	32	34	26	uncharacterized LOC104915895
CPLX2	31	30	20	32	26	26	cadherin-like and PC-esterase domain containing 1
C3H5orf49	42	33	34	26	28	26	chromosome 3 open reading frame, human C5orf22
ANKRD6	41	25	33	25	28	26	ankyrin repeat domain 6
LOC100550812	24	19	22	28	18	26	caspase recruitment domain-containing protein 11
LOC104911585	33	23	46	34	37	26	uncharacterized LOC104911585
LOC100539800	29	22	25	25	20	26	olfactory receptor 14A16-like
LOC104915951	28	22	28	31	33	26	homeobox protein Hox-A10-like
LOC104912724	30	21	29	15	33	26	uncharacterized LOC104912724
LOC100545042	33	24	24	25	25	26	C-C motif chemokine 4-like
LOC104911253	12	20	19	26	43	26	inverted formin-2-like
LOC104909385							
LOC104911927	33	13	30	12	39	26	erythroblast NAD(P)(+)-arginine ADP-ribosyltransferase pseudogene
	42	45	37	52	49	26	ankyrin repeat and protein kinase domain-containing protein 1-like
LOC104917373	38	35	35	32	38	26	histone-lysine N-methyltransferase 2B-like
LOC100543889	28	48	46	15	39	26	leukotriene C4 synthase-like
LOC104909629	27	21	27	28	28	26	uncharacterized LOC104909629
ZNF185	33	30	42	36	28	26	zinc finger protein 185 (LIM domain)
CCDC112	20	25	28	28	16	26	coiled-coil domain containing 110
LOC104915555	28	27	34	33	28	26	uncharacterized LOC104915555
LOC104917324	36	31	39	31	45	26	tetratricopeptide repeat protein 9A-like
LOC104914186	15	23	27	19	21	26	uncharacterized LOC104914186
LOC104916487	28	29	30	20	34	26	uncharacterized LOC104916487
LOC104916165	26	31	28	20	33	26	uncharacterized LOC104916165
HS6ST3	28	13	23	13	13	26	heparan sulfate 6-O-sulfotransferase 2
LOC104914896	34	34	39	29	27	26	interleukin-31 receptor subunit alpha
LOC104912545	40	22	36	24	25	26	serine/threonine-protein kinase ATR-like
LOC104916280							
	37	29	33	26	22	26	glioma tumor suppressor candidate region gene 1 protein-like
LOC100538554	27	30	31	24	26	26	cytochrome b-c1 complex subunit Rieske, mitochondrial
LOC100548805	27	15	23	23	21	26	aldehyde dehydrogenase family 3 member B1-like
C19H9orf91	33	29	26	25	27	26	chromosome 19 open reading frame, human C9orf9
LOC104909711	21	16	22	20	26	26	uncharacterized LOC104909711
CCDC71L	27	46	37	36	24	25	coiled-coil domain containing 71
RASSF7							
	36	36	32	28	17	25	Ras association (RalGDS/AF-6) domain family (N-terminal) member 7
LOC100548957	27	22	27	19	16	25	aldehyde dehydrogenase family 3 member B1
GSG1	33	45	34	32	26	25	Gse1 coiled-coil protein
LOC104914244	21	24	21	19	20	25	calsenilin-like
LOC104912543	18	24	22	24	17	25	uncharacterized LOC104912543
PNLDC1							
	31	31	27	45	36	25	poly(A)-specific ribonuclease (PARN)-like domain containing 1
LYRM9	33	22	29	24	29	25	LYR motif containing 9
TCTEX1D1	36	39	40	40	41	25	Tctex1 domain containing 1
LOC104910346	15	45	36	40	29	25	uncharacterized LOC104910346
CCDC36	25	33	22	25	29	25	coiled-coil domain containing 34
LOC104915905							
	42	28	31	21	25	25	arf-GAP with GTPase, ANK repeat and PH domain-containing protein 3-like
CASR	18	34	28	19	24	25	calsequestrin 2 (cardiac muscle)
LOC100544458							
	42	62	34	55	57	25	disintegrin and metalloproteinase domain-containing protein 12-like
GNG4	25	24	30	23	21	25	guanine nucleotide binding protein (G protein), gamma 2
SNCB	19	19	24	28	30	25	synuclein, beta
LOC100549885	19	22	20	21	22	25	olfactory receptor 1019-like
LOC104915867							
	19	20	28	30	22	25	calcium/calmodulin-dependent protein kinase type II subunit beta-like
MATN4	15	66	46	44	49	25	matrilin 4
MYOC							
	40	59	46	42	49	25	myocilin, trabecular meshwork inducible glucocorticoid response
LOC104913460	18	22	17	18	14	25	sorting nexin-29-like
CAP52	16	12	20	13	16	25	cell cycle associated protein 1
FNDC7	31	34	33	36	29	25	fibronectin type III domain containing 5
LOC104910655	17	29	24	25	24	25	uncharacterized LOC104910655
LOC104910205	17	40	17	38	31	25	dynein heavy chain 5, axonemal-like
FAM179A	19	14	15	16	17	25	family with sequence similarity 178, member B
LOC104912273	7	29	20	21	20	25	uncharacterized LOC104912273
SOST	14	34	24	26	26	25	sclerostin
FAM163B	21	16	19	17	24	25	family with sequence similarity 163, member A
LOC100543691	21	18	23	22	26	25	ecotropic viral integration site 5 protein homolog
NEURL1	67	23	50	20	26	25	neuralized E3 ubiquitin protein ligase 1
LOC104911842	14	19	22	21	21	25	uncharacterized LOC104911842

LAT2	25	29	28	19	29	25	LIM and SH3 protein 1
SH3YL1	22	21	23	20	31	25	SH3 and SYLF domain containing 1
LOC104913386	13	31	18	21	22	25	uncharacterized LOC104913386
LOC100543003	18	22	21	31	29	25	solute carrier family 22 member 13-like
LOC104914012	32	18	33	20	27	25	receptor-type tyrosine-protein phosphatase T-like
LOC104916792	22	12	26	21	22	25	uncharacterized LOC104916792
LOC104909861	26	21	30	30	29	25	uncharacterized LOC104909861
BAAT	45	39	30	32	49	25	bile acid CoA:amino acid N-acyltransferase
ITGB4	23	52	35	42	45	25	integrin beta 3 binding protein (beta3-endonexin)
LOC104910616	15	31	24	24	28	25	uncharacterized LOC104910616
EVA1C	34	40	41	38	32	25	eva-1 homolog B (C. elegans)
VIT	53	86	39	31	42	25	vitrin
COL10A1	11	47	67	15	23	25	collin
LOC104915703	26	22	16	21	22	25	zinc finger protein 501-like
LOC100551004	27	18	19	16	16	25	uncharacterized LOC100551004
B3GNT4							
	44	27	33	26	46	25	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 4
LOC100542989	15	24	19	16	20	25	ataxin-10-like
LOC104911928							
	37	22	34	27	19	25	DNA replication ATP-dependent helicase/nuclease DNA2-like
AOAH	33	23	25	47	39	25	acyloxyacyl hydrolase (neutrophil)
LOC104910719	42	28	37	29	33	25	uncharacterized LOC104910719
CDCP1	21	22	21	13	10	25	cell division cycle associated 8
CCDC57	14	46	14	29	16	24	coiled-coil domain containing 51
LOC104912077	36	24	26	25	35	24	G protein-coupled receptor kinase 5-like
LOC104909724	26	20	30	28	28	24	utrophin-like
LGALS2	26	19	22	19	14	24	lectin, galactoside-binding, soluble, 1
LOC104912078	28	40	24	48	38	24	aldose reductase-related protein 1-like
LOC104911172	36	23	34	31	36	24	RNA-binding protein Nova-1-like
SERINC4	30	36	26	39	30	24	serine incorporator 4
LOC100550995	15	17	20	25	16	24	epidermal retinol dehydrogenase 2-like
LOC104910794	26	23	19	14	17	24	uncharacterized LOC104910794
MEGF11	27	23	25	25	23	24	multiple EGF-like-domains 11
LOC104912061	53	30	39	38	36	24	uncharacterized LOC104912061
AMICA1	22	31	23	23	19	24	adhesion molecule, interacts with CXADR antigen 1
LOC104912542	28	20	27	28	27	24	sodium/hydrogen exchanger 9-like
LOC104913276	25	14	30	19	19	24	uncharacterized LOC104913276
LOC104909735							
	35	24	51	28	35	24	brefeldin A-inhibited guanine nucleotide-exchange protein 3-like
LOC100542571	25	22	23	19	15	24	keratin, type I cytoskeletal 16-like
LOC100550263	41	23	43	27	23	24	hippocampus abundant transcript 1 protein-like
ACAN	22	160	73	21	26	24	aggrecan
HTR4	24	22	21	15	37	24	5-hydroxytryptamine (serotonin) receptor 3A, ionotropic
LOC100541434	20	13	20	14	17	24	perilipin-3-like
LOC104914423	23	31	23	27	27	24	serum amyloid P-component-like
PAWR	27	34	26	31	33	24	PRKC, apoptosis, WT1, regulator
LOC104913548	13	27	18	20	18	24	uncharacterized LOC104913548
GPR182	31	32	23	30	18	24	G protein-coupled receptor 18
LOC104909501	5	15	6	19	1	24	uncharacterized LOC104909501
LOC104913712	21	23	17	25	26	24	fibril-forming collagen alpha chain-like
LOC100542101	31	16	27	11	41	24	exportin-2
C7H2orf66	34	22	19	20	26	24	chromosome 7 open reading frame, human C2orf47
LOC104913822	22	27	20	24	29	24	uncharacterized LOC104913822
RAB33A	30	23	22	23	28	24	RAB33A, member RAS oncogene family
LCAT	40	64	43	22	26	24	Leber congenital amaurosis 5-like
LOC100538897	28	15	18	21	12	24	tubulin alpha-5 chain
LOC104915772	24	37	20	18	12	24	uncharacterized LOC104915772
LOC100541069	36	26	19	38	47	24	sodium-dependent serotonin transporter-like
FAM163A	15	24	9	17	16	24	family with sequence similarity 162, member B
CACNB4	23	17	19	25	30	24	calcium channel, voltage-dependent, beta 2 subunit
KCNRG							
	27	33	38	28	29	24	potassium voltage-gated channel, KQT-like subfamily, member 5
CCL21	43	29	33	42	24	24	chemokine (C-C motif) ligand 20
LOC104911267	22	28	22	27	24	24	WD repeat domain 20
LOC104915779	26	28	18	32	52	24	uncharacterized LOC104915779
LOC104912505	20	16	21	22	21	24	spermatogenesis-associated protein 6-like
LOC104909228							
	3	11	2	12	3	24	tyrosine-protein phosphatase non-receptor type substrate 1-like
LOC104912126	26	29	27	21	29	24	type-1 angiotensin II receptor-like
LOC104917408	28	18	20	24	17	24	cadherin EGF LAG seven-pass G-type receptor 1-like
PABPC1L	23	17	39	16	33	24	poly(A) binding protein, cytoplasmic 1-like
UROCI	17	19	23	21	23	24	urocanate hydratase 1
LOC100541159	25	15	13	20	14	24	regulator of cell cycle RGCC-like
LOC104912806	40	26	43	31	24	24	unconventional myosin-Vc-like
LOC104911321	25	26	24	28	25	24	uncharacterized LOC104911321
LOC104911844	30	19	23	18	16	24	uncharacterized LOC104911844
LOC104916207	60	23	23	32	44	24	kallikrein-8-like
CHADL	26	54	29	27	18	24	chondroadherin
NMRK1	13	19	21	15	17	24	nicotinamide riboside kinase 1

LOC104912274	27	35	29	30	24	24	uncharacterized LOC104912274
KCNK1	30	25	27	15	6	24	potassium voltage-gated channel, subfamily F, member 1
LOC100540064	18	22	24	22	20	24	serine-protein kinase ATM-like
LOC104912069	16	10	10	9	9	24	uncharacterized LOC104912069
LOC104912910	18	26	33	27	37	24	uncharacterized LOC104912910
MMP11	29	34	32	31	33	24	matrix metalloproteinase 11 (stromelysin 3)
GPRIN1	28	14	24	15	23	24	G protein-coupled receptor, class C, group 6, member A
GPR22	22	40	19	22	11	24	G protein-coupled receptor 21
LOC104914156							
PPM1H	34	30	30	26	25	24	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase eta-2-like
LOC104914698	23	24	27	16	19	24	protein phosphatase, Mg2+/Mn2+ dependent, 1H
ROPN1L	31	17	24	20	20	24	AT-rich interactive domain-containing protein 3A-like
LOC104916183	27	27	22	27	25	24	rhophilin associated tail protein 1-like
LOC104914493	26	21	30	20	28	24	N-acetylserotonin O-methyltransferase-like protein
PCP4	20	21	29	18	19	24	uncharacterized LOC104914493
LOC104917509	9	28	17	22	16	24	Purkinje cell protein 4
SAMD10	17	13	21	25	22	24	epithelial-stromal interaction protein 1-like
LOC104909664	58	34	33	16	16	24	sterile alpha motif domain containing 10
LOC104916618	8	9	5	9	4	24	uncharacterized LOC104909664
OLFM3	43	13	34	12	31	24	adenylate cyclase type 10-like
LOC104910907	31	21	21	21	21	24	olfactomedin 3
LOC100549245	19	22	17	27	27	24	uncharacterized LOC104910907
PCDHAC1	15	24	12	21	9	24	HEAT repeat-containing protein 3
LOC100547719	32	20	22	29	18	24	protocadherin alpha subfamily C, 1
CFAP44	23	20	19	25	23	24	olfactory receptor 52B2-like
LOC104911146	22	27	21	23	26	24	cilia and flagella associated protein 36
MDGA2	23	14	22	16	24	23	uncharacterized LOC104911146
FAM154A	16	24	15	15	12	23	MAM domain containing glycosylphosphatidylinositol anchor 2
LOC104915068	30	19	25	18	18	23	family with sequence similarity 151, member B
ADRA1B	22	17	23	25	22	23	uncharacterized LOC104915068
LOC104913349	17	23	23	23	17	23	adrenoceptor alpha 1B
DNAH5	29	18	24	24	19	23	rab11 family-interacting protein 3-like
WDR66	24	25	25	27	29	23	dynein, axonemal, heavy chain 3
LOC104911580	50	29	42	19	20	23	WD repeat domain 66
LOC104912921	22	16	23	18	8	23	uncharacterized LOC104911580
LOC104909895	24	16	25	21	25	23	uncharacterized LOC104912921
P2RX3	19	23	26	22	23	23	uncharacterized LOC104909895
ATRN1L	20	29	24	29	29	23	purinergic receptor P2X, ligand-gated ion channel, 3
LOC100542871	27	24	32	25	22	23	attractin-like 1
LOC104917468	17	26	14	32	18	23	myosin heavy chain, skeletal muscle, adult-like
LOC104917352	29	23	35	30	15	23	uncharacterized LOC104917468
LOC104910666	16	21	12	28	17	23	spectrin beta chain, non-erythrocytic 2-like
LOC104910466	19	23	24	13	11	23	uncharacterized LOC104910666
LMO3	24	15	22	26	25	23	focal adhesion kinase 1-like
LOC104915316	23	25	21	15	21	23	LIM domain only 2 (rhombotin-like 1)
LOC100544235	24	17	16	19	20	23	uncharacterized LOC104915316
C19H9orf9	25	19	19	20	21	23	uncharacterized protein C8orf34-like
LOC100546813	16	19	17	29	16	23	chromosome 19 open reading frame, human C9orf78
LOC104909264	23	17	21	24	18	23	uncharacterized LOC100546811
LOC104915016	37	19	46	24	21	23	multidrug resistance-associated protein 4-like
LOC104912842	20	18	21	17	13	23	lysine-specific demethylase 4C-like
LOC104912497	21	17	12	19	17	23	uncharacterized LOC104912842
LOC100549986	34	26	25	19	15	23	zinc finger protein GLIS3-like
LOC104910650	14	17	10	19	15	23	ubiquitin carboxyl-terminal hydrolase 45-like
LOC100550164	18	18	22	20	15	23	uncharacterized LOC104910650
LOC100548963	34	24	19	26	21	23	polyubiquitin-B
TAGAP	28	31	27	23	20	23	GDNF family receptor alpha-1-like
LOC104917500	38	31	33	28	42	23	T-cell activation RhoGTPase activating protein
LOC104914861	22	23	23	23	27	23	uncharacterized LOC104917500
LOC104914146	34	23	30	26	24	23	F-box only protein 4-like
LOC104912591	18	23	15	25	19	23	uncharacterized oxidoreductase C663.09c-like
IKZF2	13	22	12	23	21	23	uncharacterized LOC104912591
LOC104915019	20	22	19	21	24	23	IKAROS family zinc finger 1 (Ikaros)
LOC104917339	11	12	15	15	21	23	uncharacterized LOC104915019
LOC104911075	30	22	14	18	22	23	ADM-like
LOC104910032	20	18	15	18	18	23	uncharacterized LOC104911075
LOC104910752	41	20	31	28	40	23	nuclear GTPase SLIP-GC-like
LOC104914994	27	16	23	19	19	23	uncharacterized LOC104910752
WNT4	21	25	34	18	25	23	uncharacterized LOC104914994
SHC3	25	12	30	11	15	23	wingless-type MMTV integration site family, member 4
LOC104913422	23	17	18	12	20	23	SHC (Src homology 2 domain containing) transforming protein 3
RASSF6	34	23	25	24	26	23	thiamine transporter 1-like
LOC104912073	20	28	22	17	25	23	Ras association (RalGDS/AF-6) domain family member 6
CLCN2	32	34	27	34	22	23	uncharacterized LOC104912073
LOC104909944	13	12	15	17	17	23	chloride channel, voltage-sensitive 1
LOC100539913	25	22	14	18	25	23	uncharacterized LOC104909944
	17	18	22	13	7	23	matrix metalloproteinase-16

PLAC8	44	16	26	26	24	23	placenta-specific 8
LOC104915231	41	16	26	18	20	23	uncharacterized LOC104915231
LOC104911951	28	35	27	28	35	23	DENN domain-containing protein 5B-like
LOC104913814	24	29	25	24	33	23	immunoglobulin superfamily member 3-like
IFITM10	36	39	33	32	31	23	interferon induced with helicase C domain 1
GPR18	33	23	32	22	20	23	G protein-coupled receptor 176
LOC104909394	16	15	15	17	14	23	uncharacterized LOC104909394
LOC104912783							
	11	24	23	30	63	23	transient receptor potential cation channel subfamily M member 1-like
LOC104916267	33	25	32	30	34	23	ADP-ribosylation factor-like protein 2
NRIP3	33	30	18	18	25	23	nuclear receptor interacting protein 3
LOC104911161	31	25	31	31	29	23	formin
LOC104910224	27	20	20	31	18	23	leucine-rich repeat-containing protein 16A-like
LOC104913513	22	18	24	17	27	23	rab-like protein 2A
LOC104916901	21	15	26	25	21	23	A-kinase anchor protein 9-like
LOC104910561	36	31	39	11	33	23	uncharacterized LOC104910561
LOC100541451	35	10	13	22	52	23	leucine zipper putative tumor suppressor 3
LXN	34	26	29	24	38	23	latexin
PCNXL2	19	19	16	18	15	23	pecanex-like 2 (Drosophila)
LOC104914178	16	15	21	17	15	23	uncharacterized LOC104914178
LOC104910659	14	17	14	25	17	23	uncharacterized LOC104910659
PTPN5							
	38	29	35	25	31	23	protein tyrosine phosphatase, non-receptor type 5 (striatum-enriched)
LOC104915418	18	14	19	15	27	23	uncharacterized LOC104915418
ADCY3	38	35	26	30	37	23	adenylate cyclase 3
LOC104917033	37	28	35	24	28	23	rho guanine nucleotide exchange factor 9-like
LOC104911497	11	17	13	19	26	23	uncharacterized LOC104911497
LOC104916816	18	22	21	21	18	23	outer dense fiber protein 3-like
GCHFR	30	20	28	23	30	23	GTP cyclohydrolase 1
SLC16A5							
	30	17	28	20	22	23	solute carrier family 16 (monocarboxylate transporter), member 5
FFAR4	38	20	22	20	30	23	FEZ family zinc finger 2
LOC104915344	44	28	33	27	34	22	MARVEL domain-containing protein 2-like
TBX5	27	35	38	18	29	22	T-box 5
PTPRN2							
	15	28	18	22	14	22	protein tyrosine phosphatase, receptor type, N polypeptide 2
LOC104912510	25	15	24	23	21	22	uncharacterized LOC104912510
DCAKD	30	25	33	30	43	22	DDB1 and CUL4 associated factor 8
RHOH	27	22	22	22	14	22	ras homolog family member H
TRMT112	17	36	19	34	8	22	tRNA methyltransferase 11-2 homolog (S. cerevisiae)
LOC100544448	31	13	26	22	36	22	importin-7
SOX9	20	25	28	20	20	22	SRY (sex determining region Y)-box 9
CDKL2	47	50	49	20	29	22	cyclin-dependent kinase-like 1 (CDC2-related kinase)
LOC104916352	27	29	26	28	28	22	ephrin type-B receptor 4-like
LOC104911045	16	17	14	21	11	22	uncharacterized LOC104911045
LOC100547524							
	40	23	35	23	26	22	phosphorylase b kinase regulatory subunit alpha, liver isoform-like
LOC104912566	19	27	18	23	14	22	uncharacterized LOC104912566
LOC100550809	26	21	28	34	23	22	vitamin D3 hydroxylase-associated protein
TRHDE	90	42	63	24	31	22	thyrotropin-releasing hormone degrading enzyme
DRC1	23	23	32	23	25	22	dorsal inhibitory axon guidance protein
LOC104910381	19	55	21	25	14	22	uncharacterized LOC104910381
LOC104912764	26	22	34	26	27	22	unconventional myosin-Va-like
LOC104913565	26	19	21	19	19	22	uncharacterized LOC104913565
ANKRD34C	28	16	19	18	15	22	ankyrin repeat domain 34C
LOC100546484	19	30	20	20	7	22	feather keratin Cos1-1/Cos1-3/Cos2-1-like
LOC104909969	13	25	17	23	19	22	uncharacterized LOC104909969
LOC100549626	47	46	30	30	33	22	coagulation factor XI
LOC104911509							
	23	32	26	27	14	22	polypeptide N-acetylgalactosaminyltransferase 15 pseudogene
KCNIP2	16	18	17	24	22	22	Kv channel interacting protein 1
LOC100541254	30	25	20	21	19	22	propionyl-CoA carboxylase alpha chain, mitochondrial-like
LOC104909289	21	21	25	20	16	22	limbin-like
LOXL4	21	25	18	35	21	22	lysyl oxidase-like 4
LOC104915585	10	24	11	20	12	22	transmembrane channel-like protein 1
LOC100547382	25	21	27	23	17	22	opsin-VA-like
LOC104915366	11	16	24	14	17	22	uncharacterized LOC104915366
C1H22orf23	19	20	19	24	28	22	chromosome 1 open reading frame, human C21orf91
LOC104910373	27	17	17	23	21	22	zinc finger homeobox protein 4-like
LOC100540503	26	22	19	17	23	22	forkhead box protein J1-like
LOC104917405	25	17	34	27	32	22	GRAM domain-containing protein 4-like
LOC100539893							
	8	13	10	18	10	22	small conductance calcium-activated potassium channel protein 2-like
LOC100540054	16	20	9	14	14	22	thiamine transporter 1
LOC104915975	20	16	21	13	21	22	diacylglycerol kinase alpha-like
XKR4							
	26	37	20	32	17	22	XK, Kell blood group complex subunit-related family, member 4
LOC104910409	17	16	18	13	14	22	uncharacterized LOC104910409
LOC104916861	29	23	18	25	13	22	carnitine O-acetyltransferase-like

PGBD5	39	24	28	30	28	22	piggyBac transposable element derived 5
TMC3	13	23	28	26	31	22	transmembrane channel-like 3
LOC104911013	25	22	18	22	24	22	uncharacterized LOC104911013
FAM167A	13	17	22	18	19	22	family with sequence similarity 166, member A
PCDH15	28	17	35	24	49	22	protocadherin-related 15
LOC104910654	13	23	19	22	14	22	uncharacterized LOC104910654
LOC104913122	17	12	19	18	15	22	E3 ubiquitin-protein ligase RNF123-like
LOC104910609	12	16	12	17	12	22	uncharacterized LOC104910609
KCNQ3	28	27	29	31	33	22	potassium voltage-gated channel, KQT-like subfamily, member 2
GFRA4	36	29	26	24	20	22	GDNF family receptor alpha 3
BCO2	53	53	52	65	48	22	beta-carotene oxygenase 2
LOC104910834	18	17	13	17	23	22	cytokine-dependent hematopoietic cell linker
LOC104915416	24	22	27	24	32	22	kinesin-like protein KIF3C
LOC104910454	30	13	33	25	19	22	uncharacterized LOC104910454
LOC104917521	33	26	29	28	31	22	ecto-NOX disulfide-thiol exchanger 1-like
LOC100540527	18	21	20	17	17	22	cGMP-inhibited 3',5'-cyclic phosphodiesterase A
FADS6	29	34	23	28	19	22	fatty acid desaturase 2
LOC104913816	17	21	32	20	15	22	uncharacterized LOC104913816
BIRC7	37	15	29	16	13	22	baculoviral IAP repeat containing 7
DNAH1	17	17	20	15	21	22	dynein, axonemal, assembly factor 5
WISP2	13	33	25	24	31	22	WNT1 inducible signaling pathway protein 2
LOC100546931	42	28	15	33	26	22	growth hormone receptor
LOC104916853	24	19	30	24	19	22	death-associated protein kinase 1-like
CCDC89	29	17	19	26	22	22	coiled-coil domain containing 88C
LOC100543417	28	18	26	18	29	22	mitochondrial import inner membrane translocase subunit Tim23
LDLRAD3	12	15	16	19	18	22	low density lipoprotein receptor class A domain containing 1
LOC104911839	24	5	26	13	15	21	uncharacterized LOC104911839
LOC104914651	49	31	33	11	31	21	uncharacterized LOC104914651
MADCAM1	30	18	32	28	24	21	mucosal vascular addressin cell adhesion molecule 1
LOC104914705	59	52	39	31	49	21	uncharacterized LOC104914705
KAL1	12	20	20	21	12	21	junction plakoglobin
RORA	9	21	17	32	18	21	RAR-related orphan receptor A
SPTBN5	22	20	30	18	23	21	spectrin, beta, non-erythrocytic 5
LOC104915354	29	21	35	33	22	21	transcription factor TFIIIB component B'' homolog
LOC104910479	18	17	18	22	13	21	DENN domain-containing protein 3-like
LOC100544435	22	26	23	24	17	21	adenylosuccinate synthetase isozyme 2
LOC104916468	39	24	25	23	26	21	AT-hook-containing transcription factor-like
STAB2	43	41	50	31	57	21	stabilin 2
ARL10	25	14	16	16	32	21	ADP-ribosylation factor-like 10
AIRE	22	20	17	21	22	21	autoimmune regulator
LOC104913409	20	25	19	14	18	21	chemokine-like receptor 1
LOC100546434	20	12	15	17	18	21	ras-related protein Rab-18-B-like
HPSE	26	21	24	21	32	21	Hermansky-Pudlak syndrome 6
CD164L2	17	18	15	31	45	21	CD164 molecule, sialomucin
FAM117B	24	22	25	19	15	21	family with sequence similarity 117, member A
LOC100541871	35	30	27	26	33	21	histamine N-methyltransferase-like
ENPP3	25	28	31	43	18	21	ectonucleotide pyrophosphatase/phosphodiesterase 2
NEFH	13	13	13	12	9	21	neurofilament, heavy polypeptide
LOC104916518	24	20	26	20	23	21	riboflavin kinase-like
LOC104910818	9	31	15	11	9	21	uncharacterized LOC104910818
BCL11A	31	23	29	26	24	21	B-cell CLL/lymphoma 11A (zinc finger protein)
LOC723980	49	16	28	471	43	21	avidin
TESPA1	5	18	6	12	3	21	thymocyte expressed, positive selection associated 1
LOC104910961	22	23	24	17	9	21	uncharacterized LOC104910961
CLRN2	28	10	19	10	21	21	clarin 1
ARHGEF33	35	25	34	21	28	21	Rho guanine nucleotide exchange factor (GEF) 33
WT1	19	17	17	18	17	21	Wilms tumor 1
LOC104911826	42	17	28	15	21	21	uncharacterized LOC104911826
CCDC142	25	31	23	27	17	21	coiled-coil domain containing 141
CSH1orf94	20	24	25	15	25	21	chromosome 5 open reading frame, human C11orf74
LOC104912245	25	16	23	16	13	21	probable ATP-dependent DNA helicase HFM1
CCNJL	26	23	24	18	23	21	cyclin J
TMEM40	43	21	23	22	21	21	transmembrane protein 40
NTM	31	27	22	16	17	21	neurotrimin
LOC100545453	12	9	14	13	14	21	protein phosphatase 1 regulatory subunit 12B
LOC104912142	31	32	28	35	27	21	interleukin-22 receptor subunit alpha-1-like
LOC104914710	13	18	23	23	14	21	X-linked retinitis pigmentosa GTPase regulator-like
LOC104914663	31	30	31	20	15	21	transducin-like enhancer protein 2
LOC104912549	8	21	7	21	6	21	uncharacterized LOC104912549
LOC104915844	36	26	33	37	30	21	E3 ubiquitin-protein ligase HUWE1-like
LOC100544731	63	35	61	38	72	21	cadherin EGF LAG seven-pass G-type receptor 3-like
LOC104911012	28	18	21	13	26	21	transient receptor potential cation channel subfamily M member 5-like
LOC100540904	9	24	17	11	13	21	lymphocyte antigen 6E
LOC104914583	35	20	23	26	43	21	GTPase IMAP family member 1-like
LOC104913317	19	12	19	13	21	21	uncharacterized LOC104913317

LOC104910360	3	8	38	2	9	21	carboxypeptidase A6-like
MFRP	30	38	38	20	17	21	membrane frizzled-related protein
SLC4A8	21	17	22	18	28	21	solute carrier family 4, sodium bicarbonate cotransporter, member 8
CDK5R1	27	17	22	15	20	21	cyclin-dependent kinase 5
LOC104912794	19	16	15	21	19	21	TBC1 domain family member 2B-like
EVC	12	17	15	17	16	21	eva-1 homolog C (C. elegans)
SPAG6	31	23	33	19	21	21	sperm associated antigen 6
LOC104909286	24	21	32	26	29	21	anthrax toxin receptor 1-like
LOC104917363	17	14	21	22	18	21	extended synaptotagmin-2-A-like
KCNH5	24	9	34	22	39	21	potassium voltage-gated channel, subfamily H (eag-related), member 4
LOC104912807	19	14	17	15	17	21	unconventional myosin-Va-like
TMEFF1	18	22	28	30	11	21	transmembrane protein with EGF-like and two follistatin-like domains 1
LOC100542387	25	19	26	19	27	21	potassium channel tetramerization domain containing 1
LOC104916784	12	19	21	17	19	21	class II histocompatibility antigen, B-L beta chain-like
LOC100546353	13	16	15	18	9	21	tripartite motif-containing protein 15-like
LOC104913891	21	16	23	25	21	21	general transcription factor II-I-like
LOC104916225	11	16	10	17	16	21	uncharacterized protein PB18E9.04c-like
STAC	30	19	22	15	25	21	SH3 and cysteine rich domain
LOC104915162	27	21	29	24	21	21	colorectal mutant cancer protein-like
LOC104912920	16	20	24	26	21	21	uncharacterized LOC104912920
LOC104909923	38	25	31	20	20	21	uncharacterized LOC104909923
ISCA1	23	24	20	22	20	21	iroquois homeobox 4
LOC104911713	19	21	16	20	15	21	uncharacterized LOC104911713
LTK	46	20	27	27	37	21	leukocyte receptor tyrosine kinase
LOC104916917	32	23	25	13	21	21	tetratricopeptide repeat protein 24-like
LOC104911977	29	31	44	23	27	21	synaptotagmin-10-like
LOC100546360	9	21	16	16	13	21	SLAIN motif-containing protein-like
LOC100549920	42	25	46	22	26	21	CSC1-like protein 2
EGLN3	38	34	34	27	30	21	egl-9 family hypoxia-inducible factor 1
ZNF488	11	23	18	20	18	21	zinc finger protein 488
LOC104917187	13	23	17	21	34	21	uncharacterized LOC104917187
FASLG	23	17	16	16	20	21	Fas cell surface death receptor
NCF2	41	18	21	21	30	21	neutrophil cytosolic factor 2
IL10RA	17	20	22	21	20	21	interleukin 10
LOC104912863	14	19	13	16	10	21	uncharacterized LOC104912863
NEGR1	42	31	28	39	33	21	neuronal growth regulator 1
SLC38A11	31	12	27	15	15	21	solute carrier family 38, member 11
HTR6	22	22	32	14	22	21	5-hydroxytryptamine (serotonin) receptor 5A, G protein-coupled
LOC104916395	21	17	16	15	20	21	transcription factor COE3-like
LOC104909387	47	23	42	25	52	21	uncharacterized LOC104909387
SNN	28	23	18	25	26	21	stannin
TOX3	20	22	19	13	28	21	TOX high mobility group box family member 3
LOC104916396	8	18	10	17	11	21	gap junction delta-2 protein-like
LOC104916079	20	19	14	15	16	21	solute carrier family 22 member 6-like
SPNS2	40	26	34	25	28	21	spinster homolog 2 (Drosophila)
LOC104916950	21	15	22	13	20	21	protein FAM110A-like
CETP	10	17	7	11	14	21	centrin, EF-hand protein, 3
LOC104912465	22	15	24	18	18	21	microtubule-associated serine/threonine-protein kinase 2-like
LOC104914656	16	18	16	13	17	21	uncharacterized LOC104914656
LOC104914119	32	20	26	15	17	21	heterogeneous nuclear ribonucleoprotein U-like protein 1
SLC29A4	14	16	9	18	18	21	solute carrier family 29 (equilibrative nucleoside transporter), member 4
LOC104915357	43	12	47	14	31	21	adenylate cyclase type 10-like
LOC104915999	24	19	24	14	20	21	nitric oxide synthase, endothelial-like
LOC104909952	13	21	19	18	27	21	protein eyes shut homolog
BAI3	17	23	17	17	14	20	brain-specific angiogenesis inhibitor 3
PTH1R	14	19	10	25	13	20	parathyroid hormone 1 receptor
LOC104910993	12	10	11	17	16	20	uncharacterized LOC104910993
LOC100541175	10	18	14	22	19	20	vasoactive intestinal polypeptide receptor 1-like
LOC104910910	24	20	19	22	17	20	exocyst complex component 6B-like
LOC104911006	24	16	12	27	19	20	dual specificity protein phosphatase 8-like
LOC104916540	25	17	22	22	23	20	zinc transporter 1-like
LOC104911853	15	16	15	13	9	20	uncharacterized LOC104911853
LOC104910641	17	17	11	17	14	20	uncharacterized LOC104910641
LOC104911385	21	13	19	16	10	20	rho GTPase-activating protein 21-like
LOC104909924	14	14	21	15	15	20	uncharacterized LOC104909924
LOC100539476	13	23	19	12	19	20	putative P2Y purinoceptor 10
LOC104915275	29	20	25	21	21	20	versican core protein-like
TSPAN15	17	29	34	26	17	20	tetraspanin 15
LOC104912784	12	16	11	17	13	20	uncharacterized LOC104912784
CSH15orf62	17	17	16	17	21	20	chromosome 5 open reading frame, human C15orf57
LOC104912896	26	19	17	20	24	20	inositol hexakisphosphate and diphosphoinositol-pentakisphosphate kinase 1-like
LOC104909415	36	10	24	21	23	20	teneurin-4-like

TACR2	11	37	11	31	12	20	tachykinin receptor 2
LOC100548708	21	22	21	16	12	20	collagen alpha-1(XI) chain-like
LOC104911705	23	30	23	41	21	20	potassium voltage-gated channel subfamily H member 7-like
LOC104914145	13	29	9	18	9	20	taste receptor type 1 member 3-like
LOC100549706	27	22	23	28	14	20	peroxidasin homolog
PTPRQ	73	44	43	27	33	20	protein tyrosine phosphatase, receptor type, Q
LOC104912727	33	41	29	40	44	20	von Willebrand factor-like
LOC104916214	33	17	31	34	41	20	mamu class II histocompatibility antigen, DR alpha chain-like
RNF224	23	20	12	12	18	20	ring finger protein 224
LOC100544274	20	14	24	10	24	20	E3 ubiquitin/ISG15 ligase TRIM25-like
RIMS1	36	23	33	21	36	20	regulating synaptic membrane exocytosis 1
TBC1D30	23	35	36	25	23	20	TBC1 domain family, member 30
EDAR	33	30	60	23	35	20	ectodysplasin A2 receptor
GSG1L	19	14	21	13	21	20	germ cell associated 1
LOC104915078	27	22	27	22	20	20	uncharacterized LOC104915078
ACP5	16	13	13	19	30	20	acid phosphatase 5, tartrate resistant
LOC100550576	12	17	13	21	22	20	zinc finger protein Rlf-like
OMD	19	11	19	15	19	20	osteomodulin
CHGA	25	14	14	14	18	20	checkpoint with forkhead and ring finger domains, E3 ubiquitin protein ligase
SPINK2	30	22	25	28	46	20	serine peptidase inhibitor, Kazal type 2 (acrosin-trypsin inhibitor)
RGCC	26	34	23	21	16	20	regulator of cell cycle
LOC104910344	19	14	15	12	17	20	uncharacterized LOC104910344
LOC104910579	32	19	23	24	17	20	extracellular matrix protein FRAS1-like
LOC104913051	23	15	23	16	13	20	uncharacterized LOC104913051
LOC100542776	29	23	17	19	26	20	alpha-2-macroglobulin-like protein 1
LRRC72	19	16	20	11	7	20	leucine rich repeat containing 72
LOC100546815	24	14	31	17	25	20	nuclear receptor subfamily 5 group A member 2
PMAIP1	32	12	17	19	26	20	phorbol-12-myristate-13-acetate-induced protein 1
LOC104917119	14	19	10	16	8	20	uncharacterized LOC104917119
SGCZ	33	64	69	22	85	20	sarcoglycan, zeta
LOC104911162	34	15	29	30	30	20	formin-1-like
CEND1	15	18	18	11	16	20	cell migration inducing protein, hyaluronan binding
LOC104911427	31	20	31	21	21	20	multidrug resistance protein 3-like
CRYBA1	11	17	12	18	15	20	crystallin, alpha B
LOC104912568	21	26	15	25	19	20	uncharacterized LOC104912568
LOC104910633	9	12	6	18	9	20	uncharacterized LOC104910633
RGS16	21	24	14	12	13	20	regulator of G-protein signaling 16
HRH2	17	16	22	14	13	20	histamine receptor H1
LOC104915209	30	17	22	28	15	20	cyclin-G-associated kinase-like
C4H4orf17	12	22	18	20	18	20	chromosome 4 open reading frame, human C20orf194
LOC104910446	8	26	12	18	9	20	uncharacterized LOC104910446
LOC104913764	10	14	11	13	10	20	uncharacterized LOC104913764
RASGRF1	14	20	13	14	20	20	Ras protein-specific guanine nucleotide-releasing factor 1
LOC104912458	17	16	17	14	12	20	MAP kinase-interacting serine/threonine-protein kinase 1-like
LOC104913638	25	23	25	30	22	20	atrial natriuretic peptide receptor 1-like
LOC100539825	25	19	25	23	22	20	2-hydroxyacylsphingosine 1-beta-galactosyltransferase-like
LOC104909277	28	18	27	17	18	20	T-cell receptor-associated transmembrane adapter 1
LOC104914453	24	20	20	18	13	20	neuron navigator 1-like
TRPM2	19	12	18	13	19	20	transient receptor potential cation channel, subfamily M, member 2
NTNG2	21	18	32	17	27	20	netrin G2
ZBTB20	15	18	20	22	16	20	zinc finger and BTB domain containing 20
TOPAZ1	24	20	17	26	35	20	testis and ovary specific PAZ domain containing 1
LOC104912911	28	19	21	21	16	20	uncharacterized LOC104912911
CPXM2	15	26	20	18	21	20	ceramide-1-phosphate transfer protein
DENND1B	18	21	20	21	21	20	DENN/MADD domain containing 1A
DSG2	38	7	32	6	8	20	dermatan sulfate epimerase-like
MLXIPL	10	13	17	15	17	20	MLX interacting protein-like
LOC104916086	23	15	20	21	17	19	diacylglycerol kinase alpha-like
THSD7A	30	24	30	19	25	19	thrombospondin, type I, domain containing 7A
LOC104916363	32	19	31	21	24	19	protein-lysine methyltransferase METTL21B-like
FAM109A	28	31	27	26	32	19	family with sequence similarity 107, member B
LOC104915014	20	19	19	29	28	19	uncharacterized LOC104915014
LOC104910708	30	20	27	20	16	19	uncharacterized LOC104910708
ENO4	18	16	31	10	13	19	enolase 2 (gamma, neuronal)
LOC104909285	21	21	16	19	21	19	exocyst complex component 6B-like
LOC104912319	35	20	34	19	30	19	uncharacterized LOC104912319
LOC104914367	26	30	23	26	15	19	NF-kappa-B inhibitor zeta-like
CTNNA1	23	21	29	23	24	19	catenin (cadherin-associated protein), alpha 1, 102kDa
ESR2	17	26	17	19	14	19	estrogen receptor 1
LOC104915265	16	14	28	15	21	19	uncharacterized LOC104915265
LOC100540515	30	22	24	27	21	19	leucyl-cystinyl aminopeptidase-like
LOC104909856	18	19	17	17	20	19	uncharacterized LOC104909856

LOC100550655	38	28	30	24	25	19	vitamin D3 hydroxylase-associated protein-like
LOC100548679	13	14	21	19	11	19	ubiquitin-associated protein 2
LURAP1L	10	14	14	14	10	19	leucine rich adaptor protein 1-like
LOC100543124							
KIF26B	31	28	40	27	32	19	transient receptor potential cation channel subfamily M member 6-like
SMPD3	12	11	16	17	7	19	kinesin family member 26A
							sphingomyelin phosphodiesterase 3, neutral membrane (neutral sphingomyelinase II)
LOC104912028	15	27	35	18	28	19	uncharacterized LOC104912028
LOC104909641	23	22	28	9	21	19	uncharacterized LOC104909641
LOC104916576	39	18	23	26	31	19	uncharacterized LOC104916576
LOC104910206	17	38	16	50	39	19	dynein heavy chain 5, axonemal-like
LOC104910049	22	20	17	13	14	19	uncharacterized LOC104910049
KCNQ3	23	17	22	24	16	19	potassium voltage-gated channel, subfamily G, member 2
LOC104915037	7	19	10	14	13	19	centlein-like
CTXN3	25	20	24	7	14	19	cortexin 2
GPR83	24	16	21	16	12	19	G protein-coupled receptor 82
LOC104915119	33	20	26	28	21	19	protein patched homolog 1-like
LOC104915601	15	34	20	3	17	19	antigen WC1.1-like
LOC104912795	14	13	17	20	12	19	uncharacterized LOC104912795
LOC104915495	16	17	23	21	15	19	fatty acyl-CoA hydrolase precursor, medium chain-like
LOC104912841	9	18	11	23	20	19	uncharacterized LOC104912841
LRRC56	42	30	36	30	34	19	leucine rich repeat containing 56
ASIP	11	17	11	16	16	19	agouti signaling protein
LOC100545485	12	19	10	19	13	19	adenylate kinase 7
LOC104911044	26	24	28	30	28	19	ATP-binding cassette sub-family C member 8-like
LAD1	18	17	15	34	14	19	lactamase, beta-like 1
LOC104910026	9	8	10	21	5	19	uncharacterized LOC104910026
LOC104914571	15	18	13	40	9	19	acid-sensing ion channel 2-like
LOC104913904	19	20	23	21	19	19	uncharacterized LOC104913904
ABCA7	31	36	31	30	34	19	ATP-binding cassette, sub-family A (ABC1), member 7
LOC104916413							granulocyte-macrophage colony-stimulating factor receptor subunit alpha-like
LOC104909260	26	21	31	29	17	19	uncharacterized LOC104909260
GREM1	10	23	12	12	17	19	growth regulation by estrogen in breast cancer-like
LOC104910906	16	19	18	15	24	19	uncharacterized LOC104910906
C20H17orf67	13	61	14	35	18	19	chromosome 20 open reading frame, human C17orf62
LOC100539847	13	17	11	22	14	19	tropomyosin alpha-4 chain-like
LOC104916287	48	36	33	25	28	19	proto-oncogene c-Fos-like
PIPOX	14	28	15	17	18	19	pipecolic acid oxidase
MAATS1	11	15	16	14	16	19	MYCBP-associated, testis expressed 1
LOC100543537	17	17	18	22	18	19	glypican-5-like
CD79A							
	19	26	20	13	18	19	CD74 molecule, major histocompatibility complex, class II invariant chain
LOC100546347	22	21	23	23	19	19	astacin-like metalloendopeptidase
LOC104917226							calcium channel, voltage-dependent, beta subunit associated regulatory protein
LOC104912966	17	30	24	39	26	19	uncharacterized LOC104912966
SUCNR1	29	16	27	21	28	19	succinate receptor 1
RCAN2	20	24	21	35	33	19	regulator of calcineurin 2
LOC104909731	32	29	25	30	36	19	mitogen-activated protein kinase kinase kinase 5-like
LYPD1	15	15	22	20	12	19	LY6/PLAUR domain containing 1
LOC104913469	28	36	35	39	18	19	periplakin-like
LOC104912310	16	37	21	42	19	19	receptor-type tyrosine-protein phosphatase C-like
LOC104909622	19	13	13	30	16	19	uncharacterized LOC104909622
VWA5B1	18	20	23	18	17	19	von Willebrand factor A domain containing 5B1
LOC104911692	20	30	23	22	12	19	uncharacterized LOC104911692
LOC104909441	39	22	22	33	45	19	uncharacterized LOC104909441
C30H19orf35	26	19	12	18	20	19	chromosome 30 open reading frame, human C19orf10
LOC104914902	20	14	18	17	25	19	uncharacterized LOC104914902
LOC100550636	17	14	17	17	14	19	C2 domain-containing protein 3
LOC100546571	23	17	25	16	11	19	semaphorin-3D-like
LOC104909668	49	30	40	27	41	19	histone-lysine N-methyltransferase SMYD3-like
STK39	18	15	31	20	25	19	serine threonine kinase 39
SGOL2	30	13	20	12	20	19	shugoshin-like 2 (S. pombe)
LOC104910511	12	23	16	24	15	19	uncharacterized LOC104910511
PDE11A	25	14	36	12	29	19	phosphodiesterase 11A
LOC104911546	14	13	13	14	11	19	uncharacterized LOC104911546
LOC104916965	19	20	27	18	19	19	uncharacterized LOC104916965
ABHD3	24	18	15	20	9	19	abhydrolase domain containing 3
B4GALT6	47	26	34	20	29	19	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 6
LOC104910840	27	24	23	22	20	19	uncharacterized LOC104910840
LOC104913785	13	13	9	13	11	19	regulatory-associated protein of mTOR-like
FOX51	40	21	35	25	35	19	FAD-dependent oxidoreductase domain containing 2
ABHD8	26	25	21	23	18	19	abhydrolase domain containing 8
LOC104915020	18	15	17	9	14	19	receptor-type tyrosine-protein phosphatase delta-like
LOC100550971	26	15	14	24	22	19	P2Y purinoceptor 1-like
LOC104916596	20	16	19	13	20	19	myosin-8 pseudogene
	21	64	31	56	25	19	

LOC104916825	25	15	16	12	16	19	uncharacterized LOC104916825
P2RY14	20	17	18	22	22	19	purinergic receptor P2Y, G-protein coupled, 14
CCDC85C	27	15	23	21	17	18	coiled-coil domain containing 85A
LOC104917289	21	20	21	22	15	18	histone H1-like
LOC100540799	19	12	18	15	20	18	neural Wiskott-Aldrich syndrome protein pseudogene
LOC104911330	13	30	20	26	16	18	uncharacterized LOC104911330
LOC104916408	25	17	22	15	22	18	adenylate cyclase type 6-like
LOC100539361	20	15	17	16	14	18	tubulin polyglutamylase TTL4
LOC100538406	21	13	26	9	17	18	olfactory receptor 14A16-like
LOC104916569	18	37	18	178	35	18	myosin-8
LOC100539535	32	26	26	20	14	18	cyclin-dependent kinase 11B
ZC3H12D	9	8	10	8	13	18	zinc finger CCH-type containing 12D
LOC100539666	23	15	17	21	23	18	calcium-binding mitochondrial carrier protein Aralar1-like
LOC104911065	29	23	25	20	19	18	uncharacterized LOC104911065
LOC104916388	16	7	14	10	13	18	DNA polymerase subunit gamma-1-like
BTBD8	26	15	28	19	25	18	BTB (POZ) domain containing 7
DKK3	31	20	40	23	32	18	dickkopf WNT signaling pathway inhibitor 2
PRF1	18	16	20	13	11	18	perforin 1 (pore forming protein)
CCDC169	40	32	41	27	27	18	coiled-coil domain containing 167
LOC104916038	17	13	16	21	24	18	CSa anaphylatoxin chemotactic receptor 1-like
MCSR	17	24	25	27	24	18	melanocortin 5 receptor
IGSF21	10	19	14	17	18	18	immunoglobulin superfamily, member 11
LGJ3	24	16	17	16	17	18	leucine-rich repeat LGI family, member 2
LOC104914708	19	16	22	15	19	18	uncharacterized LOC104914708
DNMT3B	32	21	27	18	23	18	DNA (cytosine-5-)-methyltransferase 3 alpha
CLDN11	30	68	22	79	35	18	claudin 10
LOC104912233	15	20	19	25	17	18	uncharacterized LOC104912233
LOC104911820	24	15	19	18	26	18	uncharacterized LOC104911820
LOC104914467	21	15	20	20	29	18	uncharacterized LOC104914467
POU6F1	23	27	27	26	25	18	POU class 6 homeobox 1
LOC104910663	31	14	35	13	21	18	uncharacterized LOC104910663
ATP8B1							
	35	27	31	23	25	18	ATPase, aminophospholipid transporter, class I, type 8B, member 1
LOC104915730	27	13	23	17	13	18	proto-oncogene vav-like
LOC104910483	7	11	21	6	15	18	collagen alpha-1(XII) chain-like
LOC104909582	21	14	19	15	28	18	uncharacterized LOC104909582
LOC104916460	20	14	18	14	20	18	interleukin-36 receptor antagonist protein-like
CD80	23	17	19	17	25	18	CD79b molecule, immunoglobulin-associated beta
CARD10	26	28	19	21	37	18	capping protein (actin filament) muscle Z-line, beta
LOC100540035	15	23	23	24	31	18	dimethylaniline monooxygenase [N-oxide-forming] 5-like
AGMO	16	9	14	10	10	18	alkylglycerol monooxygenase
LOC104916394	20	18	20	21	19	18	CCAAT/enhancer-binding protein alpha-like
LOC100551049	50	23	53	19	42	18	uncharacterized LOC100551049
LOC100538510	23	12	19	12	14	18	non-specific lipid-transfer protein pseudogene
CAPSL	6	28	13	39	33	18	calcyphosine 2
LOC100544022	17	19	13	22	20	18	TBC1 domain-containing kinase
LOC104917067	21	16	18	19	17	18	pyruvate carboxylase, mitochondrial-like
LOC104909784	9	18	7	22	6	18	uncharacterized LOC104909784
SLC39A8	9	11	13	19	11	18	solute carrier family 39 (zinc transporter), member 8
SLC17A9							
	29	15	21	15	20	18	solute carrier family 17 (vesicular nucleotide transporter), member 9
RAB38	18	31	15	25	11	18	RAB38, member RAS oncogene family
LOC104912774	17	8	20	16	7	18	uncharacterized LOC104912774
LOC104917335	25	11	25	13	16	18	ras-related protein Rap-2a-like
LOC104912346	22	18	19	20	21	18	uncharacterized LOC104912346
RASSF9							
	19	30	9	24	23	18	Ras association (RalGDS/AF-6) domain family (N-terminal) member 9
MYO3A	13	13	25	14	10	18	myosin IIIA
LOC104917328	28	21	27	21	24	18	ras-related protein Rab-33B
LOC100539486	23	11	8	16	13	18	uncharacterized LOC100539484
CCL1	12	19	15	18	14	18	cholecystokinin B receptor
LOC100540132	19	18	23	17	17	18	probable acyl-CoA dehydrogenase 6
LOC104914979	32	22	24	23	21	18	rho guanine nucleotide exchange factor 28-like
LOC104910427	20	24	24	21	24	18	oxidation resistance protein 1-like
PTK2B	24	17	23	27	23	18	protein tyrosine kinase 2 beta
LOC104913190	20	18	19	23	24	18	uncharacterized LOC104913190
LOC104910112	13	17	16	17	16	18	uncharacterized LOC104910112
LOC104913551	16	15	19	15	20	18	uncharacterized LOC104913551
LOC104909395	18	20	29	13	17	18	serine/threonine-protein kinase PAK 1
LOC104914255	19	21	35	26	31	18	uncharacterized LOC104914255
UNC13D	20	24	18	29	19	18	unc-13 homolog D (C. elegans)
LOC104914942	17	11	16	12	14	18	sex comb on midleg-like protein 1
LOC104911851	18	10	17	13	9	18	uncharacterized LOC104911851
LOC104913515	23	16	17	18	30	18	uncharacterized LOC104913515
C1H3orf52	26	17	28	21	32	18	chromosome 1 open reading frame, human C3orf38
MCM9	31	27	32	22	24	18	minichromosome maintenance complex component 9
LOC104910247	13	14	14	18	15	18	uncharacterized LOC104910247
LOC104910513	14	12	10	5	8	18	uncharacterized LOC104910513

SLC35D2						18	solute carrier family 35 (UDP-GlcNAc/UDP-glucose transporter), member D2
LOC104910299	32	13	33	16	28	18	uncharacterized LOC104910299
LOC104911832	13	12	12	12	13	18	glycosyltransferase-like domain-containing protein 1
LOC104916296	21	16	22	15	25	18	rho GTPase-activating protein 30-like
LOC100543893	32	17	23	28	24	18	myosin-8-like
CAPNS2	22	25	26	24	16	18	calpain 9
ZFPM2	16	12	16	12	15	18	zinc finger protein, FOG family member 2
LOC104909558	30	21	24	23	19	18	protein jagged-1b-like
PHYHIP1	28	25	22	22	24	18	phytanoyl-CoA 2-hydroxylase interacting protein-like
LOC104909879	14	21	19	18	16	18	protein MMS22-like
PRKAR2B	27	16	19	16	16	18	protein kinase, cAMP-dependent, regulatory, type II, beta
LHFPL4	37	22	29	26	25	18	lipoma HMGIC fusion partner-like 3
KCNF1	26	28	23	23	18	18	
	15	31	17	16	8	18	potassium voltage-gated channel, Isk-related family, member 4
SERPINC1							
CDS1	21	16	16	12	20	18	serpin peptidase inhibitor, clade C (antithrombin), member 1
LOC104913635	19	15	23	15	24	17	CMT1A duplicated region transcript 1
SUSD5	11	17	14	9	17	17	intercellular adhesion molecule 5-like
LOC100546354	22	26	17	10	18	17	sushi domain containing 5
LOC104917235	31	25	36	19	46	17	dynein heavy chain 7, axonemal
SNCG	15	13	10	10	16	17	uncharacterized LOC104917235
CD84	24	21	30	15	23	17	synuclein, gamma (breast cancer-specific protein 1)
LOC104912685	19	20	24	24	44	17	CD83 molecule
LOC104909848	30	10	22	6	5	17	uncharacterized LOC104912685
FAM180A	9	15	17	19	16	17	cyclin-dependent kinase 19-like
LOC104916272	13	50	44	15	7	17	family with sequence similarity 179, member B
ZMYND10	9	5	6	12	17	17	uncharacterized LOC104916272
LOC104912914	21	23	20	21	29	17	zinc finger, MYND-type containing 10
TMEM67	10	17	14	18	12	17	uncharacterized LOC104912914
LOC100542185	30	16	29	29	19	17	transmembrane protein 67
LOC104915983	4	11	4	23	3	17	cat eye syndrome critical region protein 5 homolog
PTGDR	13	13	15	28	17	17	uncharacterized LOC104915983
PABPN1L	30	17	29	22	26	17	prostaglandin D2 receptor (DP)
LOC104916385	16	16	13	9	8	17	poly(A) binding protein, nuclear 1-like (cytoplasmic)
LOC104914515	22	16	26	20	18	17	carbohydrate sulfotransferase 7-like
LOC100543119	16	13	19	18	16	17	SLIT-ROBO Rho GTPase-activating protein 2B-like
LOC104909281	32	22	40	18	33	17	interferon-induced guanylate-binding protein 1-like
SPARCL1	17	22	20	20	21	17	meckelin-like
FAM228B	6	13	11	10	13	17	SPARC-like 1 (hevin)
RBM47	17	16	11	19	13	17	family with sequence similarity 222, member B
LOC104913196	22	11	25	17	28	17	RNA binding motif protein 47
LOC104915148	6	18	9	15	13	17	uncharacterized LOC104913196
LOC104910243	20	9	17	9	13	17	chondroitin sulfate synthase 3
LOC104914238	28	19	19	23	26	17	rotatin-like
LOC104910889	24	21	13	17	16	17	uncharacterized LOC104914238
BIN2	23	18	24	26	23	17	uncharacterized LOC104910889
CCDC153	18	11	21	13	23	17	bridging integrator 2
LOC100548836	33	10	21	19	18	17	coiled-coil domain containing 15
LOC104915120	7	12	12	12	6	17	G-protein coupled receptor 98-like
LOC104912773	11	9	12	11	12	17	protein patched homolog 1-like
LOC104916607	24	18	19	15	15	17	uncharacterized LOC104912773
LOC104909995	8	8	12	13	15	17	polyadenylate-binding protein 4
LOC104911774	16	12	17	18	20	17	phosphatidate phosphatase LPIN3-like
LOC104913431	26	18	27	17	31	17	low-density lipoprotein receptor-related protein 2-like
LOC104914556	26	15	18	19	21	17	sorting nexin-8-like
LRRC74A	25	17	18	12	14	17	uncharacterized LOC104914556
CCDC13	15	17	13	19	18	17	leucine rich repeat containing 74A
CERS6	13	17	13	11	9	17	coiled-coil domain containing 129
LOC104911771	32	19	33	15	23	17	ceramide synthase 5
	7	22	10	18	10	17	potassium voltage-gated channel subfamily H member 7-like
LOC104913674	18	14	15	22	13	17	uncharacterized LOC104913674
LOC104916990							
LOC100549337	16	12	17	22	24	17	uncharacterized aarF domain-containing protein kinase 5-like
C8H10orf11	29	23	22	32	21	17	myosin-7-like
FOXE3	26	22	33	21	24	17	complement component 8, gamma polypeptide
LOC104914227	2	26	6	17	5	17	forkhead box C1
LOC100539697	10	21	10	18	18	17	uncharacterized LOC104914227
NLGN1	20	19	21	20	26	17	talin-1
LOC100545142	22	19	16	13	24	17	neuroligin 1
	26	21	21	17	25	17	acidic leucine-rich nuclear phosphoprotein 32 family member B
LOC104912485	28	16	22	15	21	17	kelch-like protein 42 pseudogene
GNAZ	17	23	20	19	9	17	guanine nucleotide binding protein, alpha transducing 3
GLI1	21	21	18	21	21	17	golgi glycoprotein 1
SHROOM1	25	32	30	31	38	17	shroom family member 1
LOC100543177	24	35	21	20	19	17	transcription initiation factor TFIID subunit 4-like
LOC104914478	22	11	16	17	21	17	TRAF3-interacting JNK-activating modulator-like

LOC104911945	7	17	17	9	8	17	uncharacterized LOC104911945
LOC104916943	39	22	30	30	35	17	uncharacterized LOC104916943
GRIN2B	20	14	17	16	12	17	glutamate receptor, ionotropic, N-methyl D-aspartate 2A
LOC104916794	26	20	28	16	22	17	putative maltase-glucoamylase-like protein FU16351
LOC104914431	18	13	17	13	16	17	tyrosine-protein kinase receptor TYRO3-like
LOC104913193	24	29	22	22	19	17	uncharacterized LOC104913193
TDRD9	23	12	16	12	22	17	tudor domain containing 9
LOC104910134	25	28	20	33	31	17	uncharacterized LOC104910134
LHX8	10	11	8	8	7	17	LIM homeobox 6
LOC104917094	21	14	18	18	13	17	noelin-2-like
LOC104915990	53	14	25	29	47	17	band 3 anion transport protein-like
LRRC31	15	10	10	8	8	17	leucine rich repeat containing 31
GPNMB	14	14	15	14	13	17	GPN-loop GTPase 3
LOC104909634	7	16	17	12	18	17	uncharacterized LOC104909634
KCNJ12							
	21	25	25	25	32	17	potassium inwardly-rectifying channel, subfamily J, member 11
LMX1A	25	24	14	17	18	17	lemur tyrosine kinase 2
LIME1	35	24	26	23	21	17	LIM domain containing 2
LOC104912933	26	30	16	12	7	17	uncharacterized LOC104912933
CLRN1							
	33	23	27	19	39	17	caseinolytic mitochondrial matrix peptidase chaperone subunit
LOC104913463							WAP, Kazal, immunoglobulin, Kunitz and NTR domain-containing protein
	21	10	28	6	10	17	1-like
NT5E	22	12	15	15	14	17	5'-nucleotidase, ecto (CD73)
SLC28A3							solute carrier family 28 (concentrative nucleoside transporter), member
	14	13	16	11	9	17	3
ROBO2							
	28	28	34	16	17	17	roundabout, axon guidance receptor, homolog 2 (Drosophila)
BMP2	31	28	23	21	36	17	bone morphogenetic protein 2
LOC104911761	33	18	25	34	52	17	tubulin alpha-5 chain-like
LOC104912820	10	12	10	10	8	17	long-chain-fatty-acid--CoA ligase ACSBG1-like
LOC104914779	23	16	18	18	15	17	uncharacterized LOC104914779
ASB18	23	60	23	47	22	17	ankyrin repeat and SOCS box containing 18
SH3BP1	33	17	22	14	24	17	SH3-domain binding protein 1
LOC104912781	17	15	20	10	11	17	uncharacterized LOC104912781
LOC104911848	30	28	33	19	20	17	uncharacterized LOC104911848
LOC104915018	30	21	31	20	25	17	lysine-specific demethylase 4C-like
LOC100542299	20	15	19	14	24	17	butyrophilin subfamily 1 member A1-like
LOC104909750	8	23	10	22	29	17	uncharacterized LOC104909750
LOC104909745	23	21	22	26	27	17	transmembrane protein 181-like
TDRP	14	15	10	18	15	17	testis development related protein
LOC104913637	18	21	14	20	16	17	uncharacterized LOC104913637
LOC104910656	26	16	18	17	15	17	uncharacterized LOC104910656
LOC104912879	17	16	18	10	13	17	uncharacterized LOC104912879
HCK	17	11	18	15	28	17	HBS1-like translational GTPase
IL1RL1	15	31	28	25	21	17	interleukin 1 receptor accessory protein-like 2
LOC104914911	5	11	8	9	8	17	zinc finger SWIM domain-containing protein 6-like
LOC104913558	17	20	28	21	20	16	uncharacterized LOC104913558
LOC104914265	23	14	30	16	15	16	uncharacterized LOC104914265
LOC104911644	17	14	22	15	15	16	uncharacterized LOC104911644
DRAM1							
	31	16	22	42	29	16	down-regulator of transcription 1, TBP-binding (negative cofactor 2)
C14H3orf67	13	13	11	11	4	16	chromosome 14 open reading frame, human C3orf18
LOC104912799	17	18	16	16	19	16	nuclear receptor-interacting protein 2-like
LOC104911819	20	18	26	19	15	16	formin-like protein 2
LOC100540105	20	15	21	13	25	16	secreted frizzled-related protein 2-like
LOC104914133	19	18	8	8	15	16	uncharacterized LOC104914133
TPD52L1	9	8	10	7	13	16	tumor protein D52-like 1
LOC104910298	12	15	30	10	18	16	uncharacterized LOC104910298
SPATA17	20	16	22	12	16	16	spermatogenesis associated 17
RHOV	14	18	18	21	15	16	ras homolog family member V
LOC100546803	20	15	13	12	21	16	potassium channel subfamily K member 16-like
LOC104912338	10	11	15	12	7	16	uncharacterized LOC104912338
LOC104910769	17	23	31	17	24	16	uncharacterized LOC104910769
LOC104911728	9	9	6	6	9	16	uncharacterized LOC104911728
LOC104909987							
	15	15	15	21	9	16	membrane-bound O-acyltransferase domain-containing protein 2
LOC104913105	24	21	26	23	14	16	uncharacterized LOC104913105
ESPN	30	25	28	35	20	16	extra spindle pole bodies homolog 1 (S. cerevisiae)
LOC100539329	20	15	10	16	18	16	ribonuclease P protein subunit p29-like
LOC104909383	27	17	23	18	16	16	protocadherin Fat 3-like
GABRA2	14	23	13	25	9	16	gamma-aminobutyric acid (GABA) A receptor, alpha 1
LOC100538559	30	19	36	14	36	16	autophagy-related protein 101-like
GRIK1							
	19	21	20	20	27	16	glutamate receptor, ionotropic, delta 2 (Grid2) interacting protein
LOC104916067	11	10	12	8	11	16	mucin-21-like
LOC104909855	24	15	16	16	18	16	uncharacterized LOC104909855
LOC104915996	20	22	28	13	14	16	uncharacterized LOC104915996
LOC104914256	18	18	9	10	12	16	uncharacterized LOC104914256

ARTN	24	26	24	19	13	16	artemin
LOC100547151	35	42	24	74	35	16	aminopeptidase O-like
LOC104909463	13	14	16	13	15	16	uncharacterized LOC104909463
LOC104917306	30	11	32	9	21	16	putative ADCY10-like protein
LOC104915783	23	18	23	26	21	16	uncharacterized LOC104915783
LOC104910328	17	23	19	25	20	16	uncharacterized LOC104910328
PTCRA	16	16	14	17	13	16	pre T-cell antigen receptor alpha
LOC104917443	8	11	9	16	14	16	laminin subunit beta-4-like
GABRR1	14	13	9	20	6	16	gamma-aminobutyric acid (GABA) A receptor, pi
LOC104913926	22	22	21	29	22	16	breast carcinoma-amplified sequence 3-like
LOC104910899	1	8	2	19	1	16	T-cell surface glycoprotein CD8 alpha chain-like
LOC104916871	15	22	12	16	18	16	zinc finger protein 541
LOC104909388	25	15	18	16	18	16	protein EMSY-like
LOC104914128	32	18	20	16	23	16	uncharacterized LOC104914128
LOC100543865	10	6	11	8	9	16	feather keratin Cos1-2
SDCBP2	11	18	10	17	18	16	syndecan binding protein (syntenin) 2
LOC104910679	16	14	21	18	14	16	death-associated protein kinase 1-like
LOC104916211	16	14	15	13	15	16	uncharacterized LOC104916211
LOC104910709	20	14	20	11	16	16	uncharacterized LOC104910709
LOC100551023	12	95	19	50	32	16	phospholipase A2 crotoxin basic chain-like
LOC104915076							
	10	10	12	11	8	16	sarcoplasmic reticulum histidine-rich calcium-binding protein-like
LOC100540465	19	16	25	14	15	16	uncharacterized LOC100540462
CCDC157	13	11	16	18	13	16	coiled-coil domain containing 153
HRH1	23	15	20	13	12	16	histidine-rich glycoprotein
LOC100547876	22	16	21	14	16	16	ubiquilin-1-like
GABRP	37	20	27	12	33	16	gamma-aminobutyric acid (GABA) A receptor, gamma 3
LOC100550711	34	14	47	13	81	16	hexosaminidase D-like
MATK	22	11	20	13	22	16	megakaryocyte-associated tyrosine kinase
LOC104911205	25	18	14	16	24	16	actin-fragmin kinase-like
LOC104911830	20	17	24	20	19	16	uncharacterized LOC104911830
CRYBA4	9	10	9	10	7	16	crystallin, beta A2
LOC104917051	15	26	15	22	25	16	EV15-like protein
LOC104911478	8	7	9	6	11	16	uncharacterized LOC104911478
LOC104909456	20	13	8	15	13	16	uncharacterized LOC104909456
LOC104915067	19	13	17	11	17	16	membrane-bound transcription factor site-2 protease-like
LOC100545365	19	12	15	10	13	16	uncharacterized LOC100545362
HEY2							
	18	26	19	17	28	16	hes-related family bHLH transcription factor with YRPW motif 1
LOC104913089	10	17	23	13	15	16	uncharacterized LOC104913089
LOC104915187	10	19	13	15	8	16	uncharacterized LOC104915187
RPP25	15	19	16	12	14	16	ribonuclease P/MRP 25kDa subunit
MYL2	17	26	20	17	17	16	myosin, light chain 2, regulatory, cardiac, slow
CDHR2	23	18	18	16	13	16	cadherin-related family member 1
EMX2	20	21	20	16	24	16	empty spiracles homeobox 1
RSAD2	7	7	9	26	12	16	radical S-adenosyl methionine domain containing 2
LOC104911829	16	12	16	13	22	16	uncharacterized LOC104911829
PAX6	25	21	16	10	16	16	paired box 6
LOC104912924	22	21	19	22	24	16	uncharacterized LOC104912924
ARSI	33	34	27	25	27	16	arylsulfatase family, member I
GAL	9	22	16	21	11	16	glutamate decarboxylase-like 1
LOC104913198	25	15	16	11	13	16	uncharacterized LOC104913198
SEPT7	15	25	23	21	24	16	septin 7
LOC104912816	27	20	28	21	18	16	thrombospondin type-1 domain-containing protein 4-like
LOC104914579	13	10	13	16	13	16	protein TANC2-like
IQCA1	14	13	18	13	21	15	inositol 1,3,4,5,6-pentakisphosphate 2-kinase
LOC104910372	6	19	35	8	4	15	uncharacterized LOC104910372
LOC104913722	13	17	9	19	22	15	growth arrest-specific protein 7-like
LOC104914796	5	13	13	16	12	15	killer cell lectin-like receptor subfamily F member 1
GRM7	36	20	20	8	10	15	glutamate receptor, metabotropic 3
LOC104912222	16	11	11	13	13	15	uncharacterized LOC104912222
LOC100549062	11	19	16	16	8	15	ferritin light chain-like
LOC104914580	33	10	17	22	31	15	GTPase IMAP family member 7-like
THBS4	21	16	26	14	15	15	thrombospondin 4
LOC104912029	20	29	20	18	33	15	uncharacterized LOC104912029
LOC104909265	10	15	12	13	13	15	dedicator of cytokinesis protein 8-like
LOC104912689	8	10	7	11	13	15	uncharacterized LOC104912689
OPRD1	11	15	11	7	5	15	opioid receptor, delta 1
LOC104913543	29	21	23	18	13	15	uncharacterized LOC104913543
LOC104917317							
	14	13	10	13	16	15	bromodomain adjacent to zinc finger domain protein 2A pseudogene
SORCS3	20	12	26	18	15	15	sortilin-related VPS10 domain containing receptor 3
LOC104910365	13	10	13	14	12	15	uncharacterized LOC104910365
LOC104915594	23	11	23	16	14	15	kinesin-like protein KIF20B
LOC104911049	9	8	7	10	10	15	uncharacterized LOC104911049
KIAA1377	11	16	14	8	12	15	KIAA1328 ortholog
LOC104911105	13	12	10	13	10	15	MAP kinase-activating death domain protein-like
LOC104911501	22	15	21	19	18	15	uncharacterized LOC104911501
OTOA	37	16	22	23	25	15	otoancorin

LOC104910071	21	17	17	19	18	15	uncharacterized LOC104910071
LIPH	22	17	27	19	27	15	lipase, endothelial
SSTR5	25	17	18	14	24	15	somatostatin receptor 5
CD3E	24	17	22	18	28	15	CD38 molecule
GJA9	13	16	19	12	16	15	gap junction protein, alpha 8, 50kDa
LOC100545228	14	13	10	14	14	15	fatty acyl-CoA hydrolase precursor, medium chain-like
GSC	12	14	14	15	11	15	glutaredoxin, cysteine rich 2
FABP1	36	14	24	18	30	15	fatty acid amide hydrolase 2
LOC104914803	23	11	13	13	15	15	transmembrane protein 8A-like
LOC100539646	8	40	16	26	12	15	ceramide synthase 4-like
LOC104913107	9	13	12	8	8	15	uncharacterized LOC104913107
LOC104914813	13	10	17	6	12	15	uncharacterized LOC104914813
LOC104910566	19	18	17	14	17	15	uncharacterized LOC104910566
LOC104915047	19	19	17	19	17	15	uncharacterized LOC104915047
LOC104913024	19	23	22	25	19	15	protein NLRC5-like
LOC104916179	19	15	11	13	16	15	uncharacterized LOC104916179
NME9	16	12	14	11	17	15	NME/NM23 family member 9
LOC104914202	14	20	11	18	12	15	rap1 GTPase-activating protein 1-like
SLC7A10							solute carrier family 7 (neutral amino acid transporter light chain, asc system), member 10
DRD5	15	11	19	7	13	15	dopamine receptor D4
LOC104910879	20	15	10	23	17	15	uncharacterized LOC104910879
ALB	36	24	17	17	14	15	albumin
SEC14L2	23	21	23	16	14	15	SEC14-like 2 (S. cerevisiae)
LOC100548588	10	4	32	4	21	15	sacsin
GPR82	9	13	15	15	12	15	G protein-coupled receptor 78
MMP13	25	43	30	12	28	15	matrix metalloproteinase 13 (collagenase 3)
LOC104912075	23	48	27	15	17	15	fibroblast growth factor receptor 2-like
RAP1GAP	17	26	16	16	12	15	RAP1 GTPase activating protein
LOC104911591	6	14	13	11	5	15	uncharacterized LOC104911591
LOC104911499	23	17	17	11	9	15	uncharacterized LOC104911499
TMEM196	17	12	21	10	10	15	transmembrane protein 196
PDE10A	19	11	12	17	14	15	phosphodiesterase 10A
RHOF	15	11	11	12	16	15	ras homolog family member F (in filopodia)
LOC104917000	27	21	27	21	17	15	G-protein coupled receptor 98-like
LOC104917574	25	16	20	11	17	15	phospholipid-transporting ATPase IB-like
LOC104913632	23	8	14	8	15	15	class II histocompatibility antigen, B-L beta chain-like
LOC104911823	19	18	16	10	13	15	uncharacterized LOC104911823
LOC104909997	4	8	5	13	5	15	grainyhead-like protein 1 homolog
LOC104914150	16	8	16	8	10	15	uncharacterized LOC104914150
LOC100549093	14	10	13	12	13	15	olfactory receptor 14J1-like
LOC104917477	21	16	14	21	17	15	progesterone-induced-blocking factor 1-like
C16H7orf62	21	24	15	11	11	15	chromosome 16 open reading frame, human C7orf50
LOC104909248	16	10	10	13	10	15	limbin-like
LOC104913927	15	18	13	26	17	15	breast carcinoma-amplified sequence 3-like
LOC104912508	15	16	17	18	19	15	dual specificity testis-specific protein kinase 2-like
LOC104916466	14	11	16	10	6	15	protein asteroid homolog 1-like
EPB41L4A	14	11	12	11	11	15	erythrocyte membrane protein band 4.1-like 2
LOC104911520							serine/threonine-protein phosphatase 6 regulatory ankyrin repeat subunit A-like
LOC104915921	41	19	23	21	25	15	integrin alpha-3-like
WEE2	14	13	17	23	10	15	WEE1 homolog 2 (S. pombe)
CIITA	16	14	19	21	19	15	cell death-inducing DFFA-like effector c
KIAA1211L	3	10	3	8	30	15	KIAA1211 ortholog
LOC104911589	23	12	28	11	36	15	uncharacterized LOC104911589
LOC104911284	6	15	11	20	13	15	uncharacterized LOC104911284
LOC100541987	6	12	8	24	3	15	uncharacterized LOC100541969
LOC104917065	22	9	17	18	19	15	tetra-peptide repeat homeobox protein 1-like
LOC104909538	37	17	36	22	28	15	uncharacterized LOC104909538
LOC104915100	11	15	10	12	15	15	FERM domain-containing protein 3-like
LOC104911894	12	15	19	18	16	15	glutamate receptor ionotropic, delta-1-like
LOC104911983	16	12	10	9	9	15	homeobox protein VENTX-like
EV12A	18	8	24	20	10	15	Ellis van Creveld syndrome
LOC104912005	16	10	12	11	12	15	uncharacterized LOC104912005
LOC104911508	17	15	14	19	16	15	uncharacterized protein C11orf16 homolog
LOC104915167	7	8	18	13	4	15	uncharacterized LOC104915167
ACOT12	9	10	15	16	9	15	acyl-CoA thioesterase 12
LOC104911997	4	12	9	10	4	15	diacylglycerol kinase iota-like
LOC104909870	11	12	22	13	14	15	protein MMS22-like
LOC104913849	14	12	14	11	15	15	proton myo-inositol cotransporter-like
LOC104911619	38	11	16	12	26	15	uncharacterized LOC104911619
LOC104909723	25	15	12	17	22	15	uncharacterized LOC104909723
LOC104910023	10	8	7	7	5	15	uncharacterized LOC104910023
LOC104916734	21	11	12	10	16	15	uncharacterized LOC104916734
LOC104911664	27	12	20	9	15	15	uncharacterized LOC104911664
LOC104910284							
	27	20	22	25	20	15	guanine nucleotide-binding protein G(olf) subunit alpha-like
LOC104911987	17	13	15	11	28	15	uncharacterized LOC104911987
LOC104909685	5	25	3	20	13	15	uncharacterized LOC104909685

LOC104912304	15	7	14	9	16	15	uncharacterized LOC104912304
LOC104909409	33	23	32	21	28	15	uncharacterized LOC104909409
NLR3	15	9	13	10	20	15	NLR family, CARD domain containing 3
LOC100543196	19	14	21	26	23	15	kinesin-like protein KIF1A
EPB41L4B	22	23	10	14	16	14	erythrocyte membrane protein band 4.1 like 4A
TERT	20	19	22	17	11	14	telomerase reverse transcriptase
LOC104914496	23	16	26	18	25	14	Krüppel-like factor 15
LOC104910642	9	10	17	12	11	14	uncharacterized LOC104910642
LOC104910529	6	13	10	11	10	14	uncharacterized LOC104910529
GRIA2	9	10	12	7	8	14	glyoxylate reductase/hydroxypyruvate reductase
FRRS1L	17	23	21	18	7	14	FERM and PDZ domain containing 4
LOC104910902	6	9	6	7	4	14	uncharacterized LOC104910902
MUC6	23	11	21	22	5	14	mucin 6, oligomeric mucus/gel-forming
LOC104912082	10	9	11	10	11	14	protein FAM196A-like
CA7	19	10	24	13	14	14	carbonic anhydrase VI
LOC104914487	15	9	14	12	11	14	V-set domain-containing T-cell activation inhibitor 1-like
LOC104915489	13	13	12	14	13	14	lipoma-preferred partner homolog
SYCN	22	16	25	12	19	14	syncollin
SLC1A7	32	27	33	31	50	14	solute carrier family 1 (glutamate transporter), member 7
LOC104912227	23	15	17	20	19	14	AF4/FMR2 family member 2-like
CCDC102B	11	9	11	10	4	14	coiled-coil domain containing 102A
ASCL4	20	10	25	11	37	14	achaete-scute family bHLH transcription factor 4
LOC100548001	24	17	23	18	26	14	junctophilin-1
LOC104910119	9	12	6	12	6	14	uncharacterized LOC104910119
LOC104910866	16	21	17	19	11	14	N-acetylaspartate synthetase-like
KRTCAP3	13	13	11	16	16	14	keratin 80
LOC104916797	19	13	22	20	15	14	kinesin-like protein KIF20B
LOC104909393							glycerophosphodiester phosphodiesterase domain-containing protein 4-like
	16	9	15	8	14	14	uncharacterized LOC104911377
LOC104911377	35	20	34	19	27	14	uncharacterized LOC104911377
LOC104910643	13	20	14	18	22	14	uncharacterized LOC104910643
LOC100546220	30	67	39	32	72	14	protein TENP
C5H11orf49	18	8	15	9	10	14	chromosome 5 open reading frame, human C11orf31
LOC104913902	7	19	7	22	17	14	uncharacterized LOC104913902
LOC104912771	10	11	13	12	12	14	uncharacterized LOC104912771
LOC104913851	13	8	15	15	16	14	uncharacterized LOC104913851
AMER3	8	10	17	12	11	14	APC membrane recruitment protein 3
LOC100545207	25	23	25	25	34	14	neurexin-1a-like
ARMC2	10	9	6	16	13	14	armadillo repeat containing 2
LOC100541117	23	9	15	13	9	14	transcription factor Dp-2
SLC16A12	22	13	21	14	16	14	solute carrier family 16, member 12
NPSR1	12	10	8	18	11	14	neuropeptide 5 receptor 1
IL2RB	22	16	20	12	19	14	interleukin 26
LOC104911344							
	20	16	13	18	15	14	protein kinase AMP-activated non-catalytic subunit gamma 2
C1QTNF8	20	50	44	13	20	14	C1q and tumor necrosis factor related protein 7
LOC100549016	18	14	13	10	21	14	olfactory receptor 14A16-like
LOC104911948	14	15	23	12	19	14	uncharacterized LOC104911948
STK32A	5	13	9	9	10	14	serine/threonine kinase 32A
LOC104917127							
	3	5	4	6	6	14	maestro heat-like repeat-containing protein family member 2B
MAP6	8	7	7	9	7	14	microtubule-associated protein 6
LOC104915985	9	8	7	9	11	14	uncharacterized LOC104915985
LOC104916656	12	10	13	11	8	14	uncharacterized LOC104916656
EPYC							
	10	53	22	13	11	14	ethanolaminephosphotransferase 1 (CDP-ethanolamine-specific)
GCK	21	21	20	14	22	14	GTP cyclohydrolase I feedback regulator
LOC104910040	16	10	19	14	17	14	24-hydroxycholesterol 7-alpha-hydroxylase-like
TBX2	26	20	24	23	22	14	T-box 2
LOC104910113	5	8	7	8	4	14	uncharacterized LOC104910113
LOC104916624	13	8	11	6	14	14	uncharacterized LOC104916624
LOC104912112	16	11	12	14	13	14	tyrosine-protein kinase BTK-like
LOC104915382	9	14	12	11	7	14	uncharacterized LOC104915382
LOC100539124	4	13	12	10	10	14	neuroblastoma suppressor of tumorigenicity 1
LOC104915255	16	15	18	15	10	14	uncharacterized LOC104915255
LOC104913786	24	19	17	19	18	14	regulatory-associated protein of mTOR-like
LOC100545419	14	10	20	9	10	14	cytochrome b5 reductase 4
LPAR5	10	7	10	10	15	14	lysophosphatidic acid receptor 5
LOC104909537	23	15	21	12	11	14	uncharacterized LOC104909537
HORMAD1	14	15	16	8	11	14	HOP homeobox
LOC104911870	12	26	24	44	11	14	uncharacterized LOC104911870
LOC104916821	29	17	26	22	18	14	uncharacterized LOC104916821
C2CD4C	6	15	6	14	7	14	C2 calcium-dependent domain containing 3
RND1	15	12	18	9	13	14	Rho family GTPase 1
LOC104917569	7	16	7	10	9	14	uncharacterized LOC104917569
AMIGO2	7	11	10	11	10	14	adhesion molecule with Ig-like domain 2
LOC100539065	11	10	6	11	9	14	inter-alpha-trypsin inhibitor heavy chain H3
LOC100543401	14	5	5	5	6	14	matrix metalloproteinase-27-like

KCNS3						potassium voltage-gated channel, delayed-rectifier, subfamily S, member 2
LYPD6B	15	24	13	14	15	14
LOC104909476	17	12	27	8	13	14
LOC100547244	20	16	12	16	16	14
LOC104917498	14	18	11	15	15	14
CNGA4	6	13	6	11	8	14
LOC104913449	11	20	8	12	9	14
SLITRK4	11	10	7	9	12	14
CDKL1	10	17	14	10	11	14
PSCA	20	18	18	18	17	14
LOC104913271	27	50	32	28	37	14
ATP12A	13	11	13	12	18	14
PCP4L1	28	16	20	13	14	14
LOC100547703	6	25	10	13	25	14
LOC104911362	18	18	20	22	24	14
MTTP	11	12	12	8	11	14
LOC104914618	2	10	13	8	4	14
LOC100539729	15	8	17	7	9	14
LOC104912979	25	15	15	12	19	14
GDF15	15	13	20	12	13	14
LOC104911703	13	8	18	3	12	14
LOC104914553	52	19	18	13	7	14
LOC100550133	23	75	32	18	23	14
TMEM139	22	12	11	21	15	14
LOC104913952	10	13	5	10	11	14
LOC104913215	4	15	9	24	16	14
LOC104913809	9	12	12	12	11	14
KIAA1024L	16	27	17	34	35	14
LOC104909601	12	8	19	6	9	14
LOC104915287	9	10	14	15	9	14
LOC104914057	8	9	12	16	8	14
LOC104916806	13	16	9	17	20	14
LOC104915083	26	9	24	9	19	14
						adenylate cyclase type 10-like
LOC104910990	5	11	13	16	16	14
LOC104912045	13	14	18	21	12	14
						transient receptor potential cation channel subfamily M member 6-like
	19	17	15	14	14	14
LOC104911805	19	12	19	16	9	14
LOC104915650	16	7	11	11	10	14
PML	26	13	17	17	14	14
LOC100546859	15	16	11	13	9	14
NGT2	11	7	12	8	10	14
LOC104916074	15	10	14	12	12	14
LOC104916353	14	10	11	10	6	14
GPR62	10	13	12	12	13	13
LOC100541632	11	10	9	11	5	13
SLC46A2	9	5	6	9	3	13
SLC38A8	9	18	18	25	36	13
AMDHD1	5	10	9	8	5	13
ST6GALNAC1						amidohydrolase domain containing 1
	7	7	12	7	8	13
LOC104911126	13	11	11	14	15	13
PCGF2	19	21	18	21	21	13
BEST4	11	10	11	10	10	13
THEMIS	13	7	12	10	16	13
LOC100547109	20	9	18	28	17	13
LOC104911512	5	10	6	8	3	13
BCL2L14	20	12	20	15	24	13
C2H1orf101	6	9	5	9	7	13
CCL5	31	14	20	31	29	13
LOC104909522	28	18	21	23	23	13
TFEC	17	16	14	10	20	13
LOC100542874	13	11	11	12	17	13
LOC104915726	12	9	14	9	12	13
WDR31	8	8	4	10	8	13
JAKMIP3	9	7	9	7	11	13
LOC104917057	20	14	21	15	13	13
LOC104912703	16	14	14	11	16	13
HSF4	12	11	11	12	12	13
LOC104911704						heat shock transcription factor 2
	26	19	20	19	21	13
LOC100550430	14	13	13	17	10	13
LHX1						interferon-induced helicase C domain-containing protein 1-like
	23	16	15	15	16	13
LOC104909872	19	16	12	11	10	13
LOC104914317	10	11	13	12	9	13
LOC100540009	6	8	3	5	5	13
ELOVL2	10	12	10	25	30	13
						phospholysine phosphohistidine inorganic pyrophosphate phosphatase
						uncharacterized LOC104909872
						type II inositol 1,4,5-trisphosphate 5-phosphatase-like
						protein-lysine methyltransferase METTL21E-like
						ELOVL fatty acid elongase 1

PLA2G12B	10	10	11	15	10	13	phospholipase A2, group XIIIB
LOC104912009	29	16	24	18	26	13	uncharacterized LOC104912009
LOC100540905	14	14	15	15	8	13	cytochrome P450 26A1
LOC100539788	19	15	20	20	18	13	zinc finger protein 536
NDP	25	32	19	21	22	13	Norrie disease (pseudoglioma)
LOC104912109	9	7	9	6	6	13	voltage-dependent calcium channel subunit alpha-2/delta-4-like
LOC100547251	8	9	15	5	18	13	leucine-rich repeat and fibronectin type III domain-containing protein 1-like protein
LOC100545163	15	24	16	22	20	13	histone H3.3-like
LOC104911586	9	15	7	9	14	13	uncharacterized LOC104911586
CHRM4	18	12	19	14	21	13	cholinergic receptor, muscarinic 3
LOC100538944	13	17	13	17	7	13	probable ATP-dependent RNA helicase DDX60
WNT2	13	23	9	15	23	13	wingless-type MMTV integration site family member 2
LOC104909506	8	12	5	6	3	13	uncharacterized LOC104909506
LOC104915232	27	14	25	17	14	13	maestro heat-like repeat-containing protein family member 7
ATP8B3	35	11	13	12	22	13	ATPase, aminophospholipid transporter, class I, type 8B, member 3
LOC104911739	9	12	4	4	4	13	uncharacterized LOC104911739
SLC30A10	32	12	20	18	25	13	solute carrier family 30, member 10
LOC104916629	12	11	4	10	8	13	protocadherin alpha-5-like
HoxA11	17	5	9	12	7	13	homeobox A10
LOC104912833	12	11	13	6	5	13	protein FAM227B
LOC104913298	9	32	17	25	6	13	LON peptidase N-terminal domain and RING finger protein 1-like
LOC100541413	9	10	13	14	12	13	parafibromin-like
FAM83C	11	8	10	12	15	13	family with sequence similarity 83, member B
PRR22	40	19	35	12	27	13	proline rich 22
LOC104916936	6	18	11	23	10	13	microtubule-actin cross-linking factor 1-like
LRRTM4	12	23	8	20	20	13	leucine rich repeat transmembrane neuronal 4
LOC104911579	12	11	8	13	7	13	uncharacterized LOC104911579
LOC104910560	11	9	7	6	7	13	uncharacterized LOC104910560
LOC104909305	18	14	16	15	11	13	protein fantom-like
TRPA1	17	12	10	10	12	13	transient receptor potential cation channel, subfamily A, member 1
LOC104911410	14	14	12	15	7	13	uncharacterized LOC104911410
CERS3	14	14	14	12	10	13	ceramide synthase 2
CSAD	11	14	5	12	5	13	citrate synthase
LOC104913470	18	27	15	31	10	13	periplakin-like
LOC104912241	9	11	18	10	13	13	uncharacterized LOC104912241
LOC100546372	8	12	8	12	9	13	chromodomain-helicase-DNA-binding protein 1-like
LOC104915039	7	8	7	6	6	13	centlein-like
LOC104912090	19	12	16	9	9	13	uncharacterized LOC104912090
PDCD1LG2	23	19	32	23	24	13	programmed cell death 1 ligand 2
BTBD17	8	13	10	18	21	13	BTB (POZ) domain containing 11
LOC104917061	18	18	12	17	16	13	IQ motif and SEC7 domain-containing protein 2-like
LOC104911522	31	22	21	25	21	13	cyclic AMP-responsive element-binding protein 5-like
LOC104915106	21	14	16	15	15	13	patched domain-containing protein 1-like
LOC104909208	9	7	10	21	9	13	leukocyte immunoglobulin-like receptor subfamily B member 2
LOC104916134	9	17	13	18	8	13	zinc finger protein 586-like
LOC104912115	15	29	17	26	8	13	uncharacterized LOC104912115
PAX9	20	16	19	12	14	13	paired box 9
LOC104911275	8	7	6	8	5	13	uncharacterized LOC104911275
HRH3	13	18	9	11	10	13	histamine receptor H2
C12H1Sor26	14	9	10	10	12	13	chromosome 11 open reading frame, human C3orf70
LOC104913840	12	14	9	1	8	13	antigen WC1.1-like
KDF1	10	9	7	10	7	13	KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 3
LOC104913749	17	8	12	13	10	13	uncharacterized LOC104913749
LOC100541990	15	17	22	16	20	13	myelin-oligodendrocyte glycoprotein-like
LOC104914731	19	15	14	12	19	13	phospholipid-transporting ATPase IC-like
LOC104913350	7	12	11	9	8	13	nucleolar protein 58-like
LOC100544441	6	16	11	14	17	13	L-threonine 3-dehydrogenase, mitochondrial
WNT9A	7	6	11	7	6	13	wingless-type MMTV integration site family, member 9A
LOC100545780	6	9	7	4	6	13	vesicular inhibitory amino acid transporter-like
LOC104911691	9	19	8	19	12	13	rac GTPase-activating protein 1-like
LOC104911957	15	13	9	13	10	13	uncharacterized LOC104911957
LOC104909749	19	11	15	10	8	13	uncharacterized LOC104909749
EFCAB12	15	10	16	6	8	13	EF-hand calcium binding domain 11
LOC104909822	24	15	15	12	12	13	protein FAM184A-like
SIDT1	16	12	14	10	11	13	SID1 transmembrane family, member 1
SSNA1	15	14	15	11	14	13	Sjogren syndrome nuclear autoantigen 1
LOC104915494	20	18	17	14	21	13	fatty acyl-CoA hydrolase precursor, medium chain-like
LOC104916472	17	12	15	16	10	13	adenylate cyclase type 6-like
LOC104912838	8	6	3	4	7	13	uncharacterized LOC104912838
LOC104910149	9	6	4	6	3	13	cadherin-10-like
ANKS4B	5	5	15	11	4	13	ankyrin repeat and sterile alpha motif domain containing 4B

RGS22	21	18	12	12	18	13	regulator of G-protein signaling 22
LOC104916324	13	17	10	11	14	13	uncharacterized LOC104916324
ACR	9	5	17	6	12	13	acrosin
VIL1	10	18	12	20	15	13	villin 1
DGKH	22	15	15	16	19	13	diacylglycerol kinase, gamma 90kDa
LOC100540763	9	8	10	12	12	12	WD repeat-containing protein 11-like
PHEX	29	8	33	19	6	12	phosphate regulating endopeptidase homolog, X-linked
LOC100549030	22	9	10	13	21	12	RAB42, member RAS oncogene family
PET117	8	8	13	9	5	12	PET117 homolog (S. cerevisiae)
LOC104910265	7	6	6	6	4	12	uncharacterized LOC104910265
LOC104912564	17	14	15	8	6	12	uncharacterized LOC104912564
P2RX6	6	7	7	2	3	12	purinergic receptor P2X, ligand-gated ion channel, 6
GABRB2	15	11	11	17	16	12	gamma-aminobutyric acid (GABA) A receptor, beta 1
CUX2	8	9	9	12	3	12	cut-like homeobox 1
LOC100541471	7	9	7	13	8	12	ovomucoid
LOC104911891	11	10	11	10	12	12	ELKS/Rab6-interacting/CAST family member 1-like
LOC100549208	8	10	16	9	12	12	opsin-5-like
LOC104917414	13	13	15	17	16	12	uncharacterized LOC104917414
BAIAP2L2	11	21	11	20	19	12	BAI1-associated protein 2-like 2
LOC104912547	13	14	18	14	11	12	uncharacterized LOC104912547
LOC104917506	10	8	9	10	11	12	uncharacterized LOC104917506
LOC104911911	20	13	13	22	11	12	AT-rich interactive domain-containing protein 5B-like
LOC104912070	5	8	5	5	2	12	uncharacterized LOC104912070
LOC104914983	17	13	13	15	12	12	rho guanine nucleotide exchange factor 28-like
LOC104910496	1	7	3	10	12	12	amphiphysin-like
NTRK2	16	17	15	17	13	12	neurotrophic tyrosine kinase, receptor, type 2
LOC104911488	5	8	10	10	5	12	leucine-rich repeat-containing protein 16B-like
LOC104914585	10	9	10	8	9	12	oocyte zinc finger protein XICOF6-like
LOC104912959	17	12	15	7	9	12	uncharacterized LOC104912959
C8H10orf128	7	11	18	9	13	12	chromosome 8 open reading frame, human C10orf12
LOC104916080	11	15	11	20	10	12	receptor tyrosine-protein kinase erbB-3-like
LOC104913049	13	14	13	21	13	12	uncharacterized LOC104913049
LOC104910596	11	8	11	16	13	12	uncharacterized LOC104910596
LOC104910443	13	12	9	9	12	12	uncharacterized LOC104910443
LOC104912096	19	17	19	16	31	12	uncharacterized LOC104912096
LOC100550324	4	17	3	15	4	12	MAP7 domain-containing protein 2
ANGPTL7	22	30	66	18	30	12	angiotensin-like 7
LOC104914164	19	13	19	20	13	12	arginine-glutamic acid dipeptide repeats protein-like
ABCA13	11	7	8	8	4	12	ATP-binding cassette, sub-family A (ABC1), member 13
LOC104915813	17	14	12	15	13	12	histone-lysine N-methyltransferase 2D-like
LOC104912364	17	5	11	10	12	12	dihydropyrimidine dehydrogenase [NADP(+)]-like
MAPK8IP2	14	21	11	19	12	12	mitogen-activated protein kinase 8 interacting protein 2
LOC104912671	2	11	7	10	9	12	uncharacterized LOC104912671
PAPOLG	11	9	9	9	4	12	poly(A) polymerase gamma
LOC104915318	18	11	19	10	8	12	intraflagellar transport protein 74 homolog
LOC104910809	14	15	12	16	9	12	uncharacterized LOC104910809
LOC104912946	12	11	11	13	6	12	uncharacterized LOC104912946
FAM162B	7	8	12	4	9	12	family with sequence similarity 162, member A
SRD5A2	7	10	5	13	14	12	steroid-5-alpha-reductase, alpha polypeptide 2 (3-oxo-5 alpha-steroid
LOC104910946	14	10	8	9	5	12	delta 4-dehydrogenase alpha 2)
LOC104911369	17	9	14	10	9	12	uncharacterized LOC104910946
LOC104910322	13	8	11	10	10	12	uncharacterized LOC104911369
LOC104912602	11	14	5	13	8	12	putative Polycomb group protein ASXL3
LOC100541131	23	11	21	16	18	12	aquaporin-12-like
LOC100547197	20	16	15	14	12	12	G protein-activated inward rectifier potassium channel 4-like
LOC100545050	14	10	8	11	11	12	probable global transcription activator SNF2L2
LOC104916872	14	9	11	10	15	12	rho guanine nucleotide exchange factor 28-like
TEX33	6	10	11	8	6	12	bridging integrator 2 pseudogene
TMEM59L	10	8	10	9	5	12	testis expressed 33
LOC104911313	11	11	12	9	8	12	transmembrane protein 59-like
LOC104912923	14	19	14	16	12	12	uncharacterized LOC104911313
LOC100544563	12	9	16	11	7	12	uncharacterized LOC104912923
LOC100544740	14	13	12	7	5	12	alpha-1-antiproteinase 2-like
LOC100543035	12	12	10	11	9	12	ribosome-releasing factor 2, mitochondrial-like
LOC100550910	7	12	10	10	12	12	keratin, type I cytoskeletal 19-like
LOC100543880	20	16	16	17	17	12	relaxin receptor 1-like
LOC104916118	16	13	15	8	12	12	alkaline ceramidase 3-like
LOC100547689	46	16	51	19	74	12	uncharacterized LOC104916118
LOC104915199	6	13	16	7	12	12	cohesin subunit SA-1
SPAG8	8	11	6	5	5	12	uncharacterized LOC104915199
CHST11	15	10	9	5	17	12	sperm associated antigen 8
CCDC176	6	16	4	10	7	12	carbohydrate sulfotransferase 10
LOC100126556	15	9	18	6	10	12	coiled-coil domain containing 174
PARP8	17	14	18	12	18	12	ligand of numb-protein X 2
UPK3A	16	19	24	13	24	12	poly (ADP-ribose) polymerase family, member 8
LOC100550045	6	18	6	7	4	12	uroplakin 3A
						12	lamin-L(III)-like

TMED6							
	11	8	9	6	8	12	transmembrane emp24 protein transport domain containing 6
LOC104915052	14	25	40	27	17	12	uncharacterized LOC104915052
S100Z	33	16	31	18	13	12	S100 calcium binding protein Z
LOC104916283	21	10	16	10	12	12	uncharacterized LOC104916283
LOC100542975	6	11	6	5	7	12	histone H2A type 2-B-like
LOC100541825	7	8	10	5	9	12	vascular endothelial growth factor receptor 1
TPH1	13	9	9	10	6	12	tryptophan hydroxylase 1
LOC104909852	9	19	10	19	12	12	forkhead box protein O3-like
PPFIA2							protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF),
	12	8	4	10	11	12	interacting protein (liprin), alpha 2
T	11	7	11	6	9	12	T, brachyury homolog (mouse)
LOC104912353	11	12	12	18	20	12	ras/Rap GTPase-activating protein SynGAP-like
LOC104913693							putative UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase
	16	10	14	11	10	12	LOC100288842
LOC104910985	7	10	8	12	7	12	uncharacterized LOC104910985
CLVS1	6	8	9	11	10	12	clusterin-like 1 (retinal)
LOC104914877	11	13	12	17	12	12	integrin alpha-1-like
LOC104917525	9	10	11	15	9	12	diacylglycerol kinase eta-like
LOC104911179	7	8	13	11	6	12	uncharacterized LOC104911179
TMEM200C	7	21	11	25	11	12	transmembrane protein 200C
PCYT1B	17	10	14	11	12	12	phosphate cytidyltransferase 1, choline, beta
LOC104916522	10	8	10	9	9	12	homeobox protein Hox-C8-like
SYT13	5	6	5	5	9	12	synaptotagmin XIII
LOC104914083	12	17	12	20	11	12	tissue factor pathway inhibitor 2-like
CABYR	17	14	11	14	14	12	calcium binding protein 7
LOC104910291	14	17	10	14	6	12	uncharacterized LOC104910291
ABCA4	6	11	7	16	7	12	ATP-binding cassette, sub-family A (ABC1), member 4
LOC104914567	10	14	12	13	17	12	uncharacterized LOC104914567
PPIL6	11	21	14	17	12	12	peptidylprolyl isomerase (cyclophilin)-like 6
LOC104910745	15	13	9	14	10	12	uncharacterized LOC104910745
TACR1	12	20	15	12	6	12	tachykinin receptor 1
STX11	15	10	7	15	7	12	syntaxin 11
KRT20	13	12	9	9	18	12	keratin 18
LOC104913696	7	7	4	11	7	12	uncharacterized LOC104913696
LOC104911964	21	9	18	7	8	12	uncharacterized LOC104911964
LOC104915077	13	33	9	19	36	12	uncharacterized LOC104915077
LOC104911207	20	19	9	20	18	12	uncharacterized LOC104911207
CRYGS	10	13	13	8	8	12	crystallin, gamma N
LOC104910774	13	8	15	11	11	12	uncharacterized LOC104910774
LOC104911331	20	21	22	14	14	12	uncharacterized LOC104911331
PACRG	6	9	5	12	6	12	PARK2 co-regulated
MDGA1							
	28	12	41	16	22	12	MAM domain containing glycosylphosphatidylinositol anchor 1
LOC104917176	10	8	11	6	9	12	uncharacterized LOC104917176
RAB17	10	10	14	11	15	12	RAB17, member RAS oncogene family
CCDC181	14	13	8	11	15	12	coiled-coil domain containing 18
LOC104911763	6	11	5	13	7	12	rac GTPase-activating protein 1-like
LOC104913264	14	15	18	11	21	12	uncharacterized LOC104913264
USH1G	7	7	11	6	8	12	Usher syndrome 1G (autosomal recessive)
CCDC103	10	14	10	11	9	12	coiled-coil domain containing 102B
LOC104916654	11	15	11	10	15	12	uncharacterized LOC104916654
LOC100538447	13	11	15	10	13	12	phospholipase C eta 2
LOC104915123	7	9	11	7	5	12	coiled-coil domain-containing protein 146-like
PPP1R36	14	10	8	9	16	12	protein phosphatase 1, regulatory subunit 36
LOC104909919	11	6	17	8	4	11	collagen alpha-1(XII) chain-like
LOC104910702	9	21	21	9	3	11	uncharacterized LOC104910702
LOC104909713	13	4	11	8	19	11	uncharacterized LOC104909713
LOC100540703	12	11	9	9	8	11	sodium/hydrogen exchanger 2-like
BRICD5	8	9	9	9	21	11	BRI3 binding protein
LRRC46	9	6	5	6	8	11	leucine rich repeat containing 46
KCNC2							
	25	25	27	14	18	11	potassium voltage-gated channel, Shaw-related subfamily, member 1
ISM1	6	28	20	23	6	11	ISL LIM homeobox 1
WAS	20	15	18	10	18	11	Wiskott-Aldrich syndrome
LOC104915891	11	6	7	7	10	11	interleukin-23 receptor-like
LOC104917428	15	11	12	11	10	11	uncharacterized LOC104917428
LOC100545120	13	17	20	14	11	11	macrophage mannose receptor 1-like
TNFRSF8	13	13	20	11	8	11	tumor necrosis factor receptor superfamily, member 8
SEEL	24	32	27	25	23	11	sciellin
HS3ST2	9	10	10	13	12	11	heparan sulfate (glucosamine) 3-O-sulfotransferase 1
RTN4RL1	9	15	15	8	9	11	reticulin 4 receptor-like 1
RBM11	7	12	10	8	9	11	RNA binding motif protein 11
OPN3	10	8	5	9	8	11	opsin 3
LOC104909827	10	19	16	9	3	11	proto-oncogene tyrosine-protein kinase ROS-like
TLCD2	14	17	8	8	10	11	TLC domain containing 2
LOC104913358	14	9	12	8	10	11	uncharacterized LOC104913358
LOC100544777	14	7	10	7	16	11	uncharacterized LOC100544777
LOC104911451	21	14	17	13	16	11	protein AF-10-like

GF11B	30	10	15	15	18	11	growth factor independent 1 transcription repressor
C23H1orf167	13	15	14	12	21	11	chromosome 23 open reading frame, human C1orf159
LOC104912375	5	12	5	4	5	11	laforin, isoform 9-like
ADCYAP1R1	15	12	12	16	10	11	adenylate cyclase activating polypeptide 1 (pituitary) receptor type I
LOC104910359	13	6	10	9	15	11	phosphatidylinositol 3,4,5-trisphosphate-dependent Rac exchanger 2
LOC100543055	19	12	17	13	15	11	protein-like
LOC104917344	14	8	8	12	11	11	polypeptide N-acetylgalactosaminyltransferase 18
LOC100545842	7	7	4	6	7	11	carbohydrate sulfotransferase 7-like
LOC100550702	11	13	9	12	5	11	aldose reductase-like
LOC104915164	12	7	12	12	11	11	solute carrier family 2, facilitated glucose transporter member 5-like
CHST1	12	20	21	9	6	11	adenomatous polyposis coli protein-like
SLC26A7	2	2	6	4	10	11	cholinergic receptor, nicotinic, gamma (muscle)
CCDC83	8	11	10	11	7	11	solute carrier family 26 (anion exchanger), member 7
NUAK2	3	12	2	10	8	11	coiled-coil domain containing 82
DTX1	13	12	9	10	15	11	NUAK family, SNF1-like kinase, 2
LOC104916181	25	16	19	16	22	11	DTW domain containing 2
LOC104914880	7	8	16	13	13	11	integrin alpha-3-like
FAM159A	3	7	3	4	4	11	uncharacterized LOC104914880
EFCAB5	7	15	12	14	10	11	family with sequence similarity 155, member B
LOC104914538	3	6	8	7	9	11	EF-hand calcium binding domain 3
GATA6	10	12	9	8	6	11	metabotropic glutamate receptor 4-like
LOC104911149	15	11	16	10	9	11	GATA binding protein 5
KCNA1	10	5	11	9	15	11	uncharacterized LOC104911149
LOC104916393	12	11	10	14	14	11	potassium channel modulatory factor 1
LOC104913527	13	10	20	11	9	11	ephrin-A4-like
LOC104909824	11	9	5	8	11	11	uncharacterized LOC104913527
LOC100546217	3	19	5	19	7	11	amine sulfotransferase-like
LOC100549178	14	7	11	11	16	11	DNA-directed RNA polymerases I and III subunit RPAC2-like
MOV10L1	11	10	11	13	10	11	UPF0505 protein C16orf62-like
LOC100548663	18	11	20	13	10	11	Mov10 RISC complex RNA helicase like 1
LOC104909548	14	15	18	9	24	11	14 kDa phosphohistidine phosphatase-like
LOC104911296	9	7	5	7	5	11	uncharacterized LOC104909548
LOC104909321	25	21	15	10	14	11	uncharacterized LOC104911296
GJD4	22	11	23	9	16	11	selectin L
LOC104915059	8	8	10	9	5	11	gap junction protein, delta 2, 36kDa
TDRD12	21	13	22	15	15	11	uncharacterized LOC104915059
LUZP2	14	13	20	12	13	11	tudor domain containing 12
LOC104912976	9	10	12	14	13	11	leucine zipper protein 2
LOC104916827	6	8	7	5	9	11	uncharacterized LOC104912976
LOC100538375	18	12	13	10	16	11	cadherin EGF LAG seven-pass G-type receptor 2-like
LOC104909675	6	6	10	12	7	11	cathelicidin-2
CACFD1	25	9	29	8	20	11	potassium channel subfamily K member 17-like
LOC104909404	7	6	9	8	6	11	calcium binding tyrosine-(Y)-phosphorylation regulated
LOC104910476	15	14	11	13	25	11	synaptotagmin-like protein 2
CBLN4	11	23	16	18	17	11	brain-specific angiogenesis inhibitor 1-like
LOC104914801	5	8	6	10	4	11	cerebellin 2 precursor
LOC104910973	11	22	5	9	5	11	uncharacterized LOC104914801
LOC104909544	18	12	12	12	15	11	uncharacterized LOC104910973
LOC104914193	9	9	7	9	5	11	uncharacterized LOC104909544
LOC104916030	14	9	11	10	12	11	uncharacterized LOC104914193
ZBTB7C	9	11	10	7	9	11	uncharacterized LOC104916030
DGKK	15	11	14	11	16	11	zinc finger and BTB domain containing 7C
DCLK1	26	13	27	12	11	11	diacylglycerol kinase, iota
CD5	13	13	16	10	15	11	deoxycytidine kinase
LOC104910362	33	21	28	22	11	11	CD47 molecule
LOC104909526	14	9	11	13	10	11	potassium voltage-gated channel subfamily B member 2-like
LOC100539637	14	9	12	14	15	11	uncharacterized LOC104909526
LOC100546506	17	13	21	10	14	11	solute carrier family 1 (high affinity aspartate/glutamate transporter), member 6
IL7R	17	10	13	15	13	11	integrin alpha-8
LOC104912001	13	15	17	18	12	11	interleukin 6 receptor
ANKMY1	15	13	15	10	12	11	transcription factor SOX-5-like
EN1	9	22	13	10	5	11	ankyrin repeat and MYND domain containing 1
ERICH3	12	12	13	17	10	11	empty spiracles homeobox 2
LOC104913222	13	10	11	12	10	11	glutamate-rich 1
LOC104914821	15	14	9	11	11	11	PH and SEC7 domain-containing protein 2-like
AJAP1	12	7	15	6	9	11	PDZ domain-containing protein 2-like
LOC104917183	18	10	15	12	8	11	adherens junctions associated protein 1
SYT12	13	19	19	14	16	11	uncharacterized LOC104917183
LOC104914182	28	34	21	13	14	11	synaptotagmin XII
LOC100541319	15	11	6	7	8	11	natriuretic peptides A
LOC104916426	14	12	15	14	14	11	serine protease inhibitor Kazal-type 5-like
LOC104910950	8	5	8	4	4	11	uncharacterized LOC104916426
GLRB	9	7	8	5	7	11	ras-related protein Rab-15-like
						11	glycine receptor, alpha 4

LOC100538523	21	13	19	10	19	11	heat shock factor 2-binding protein-like
CAMK1G	12	7	17	8	13	11	calcium/calmodulin-dependent protein kinase ID
RAB44	16	10	15	10	21	11	RAB44, member RAS oncogene family
LOC104913791	32	22	16	23	25	11	myosin XVB
LOC104911152	9	8	10	5	5	11	uncharacterized LOC104911152
ST6GALNAC2	21	24	18	14	17	11	ST6 (alpha-N-acetyl-neuraminyl-2,3-beta-galactosyl-1,3)-N-acetylglactosaminide alpha-2,6-sialyltransferase 2
GPR139	9	9	12	7	11	11	G protein-coupled receptor 137C
DLGAP2	11	5	6	4	1	11	discs, large (Drosophila) homolog-associated protein 1
LOC100549632	29	11	26	10	26	11	rap1 GTPase-GDP dissociation stimulator 1-like
FAM84A	9	12	10	8	9	11	family with sequence similarity 83, member H
LOC104915035	10	11	14	11	4	11	centlein-like
LOC104909966	7	4	7	6	5	11	zinc finger protein 707-like
LOC104910725	19	11	12	8	6	11	uncharacterized LOC104910725
TRPM8	24	15	17	11	19	11	transient receptor potential cation channel, subfamily M, member 8
SLC18A1	16	14	14	10	9	11	solute carrier family 18 (vesicular monoamine transporter), member 1
TNFRSF6B	16	10	12	16	4	11	tumor necrosis factor receptor superfamily, member 6b, decoy
LOC100550375	20	5	4	8	13	11	E3 SUMO-protein ligase RanBP2-like
LOC104916567	13	31	12	16	8	11	uncharacterized LOC104916567
INSRR	8	9	10	7	5	11	insulin receptor
RANBP1	15	3	5	4	15	11	RAN binding protein 1
C25H1orf216	13	20	14	17	17	11	chromosome 24 open reading frame, human C8orf4
C2H6orf165	24	17	18	13	19	11	chromosome 2 open reading frame, human C6orf163
DRD1	11	18	21	14	17	11	dynein regulatory complex subunit 7
LOC104910426	0	6	1	6	3	11	uncharacterized LOC104910426
LOC104910681	10	9	10	13	9	11	tyrosine-protein phosphatase non-receptor type 13-like
SEPT6	11	20	12	13	14	11	septin 6
LOC100550333	5	6	6	6	10	11	thyroglobulin-like
LOC104917042	1	9	1	9	3	11	uncharacterized LOC104917042
LOC104910998	14	6	12	11	7	11	protein inscuteable homolog
LOC100549668	20	9	10	9	16	11	uncharacterized LOC100549666
SEMA3E	22	57	19	47	12	11	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3E
LOC104917361	12	12	19	9	15	11	nanos homolog 1-like
LOC104909818	7	10	8	11	10	10	uncharacterized LOC104909818
LOC104909946	22	11	9	14	8	10	collagen alpha-1(XI) chain-like
LOC104914818	13	9	14	14	8	10	PDZ domain-containing protein 2-like
LOC104913747	5	8	6	8	4	10	uncharacterized LOC104913747
CX3CR1	14	4	12	7	20	10	chemokine (C-X3-C motif) ligand 1
AHRR	12	6	12	5	8	10	aryl-hydrocarbon receptor repressor
LOC104912382	9	8	11	12	9	10	dynammin-3-like
G6PC2	7	8	6	7	6	10	glucose-6-phosphatase, catalytic subunit
LOC100544134	16	12	12	14	10	10	ectonucleotide pyrophosphatase/phosphodiesterase family member 1-like
LOC100546110	7	17	13	18	7	10	COMM domain-containing protein 5-like
LOC104913633	15	10	17	14	12	10	inhibitor of growth protein 3 pseudogene
LTB4R	9	7	12	6	15	10	leukotriene B4 receptor
LOC100546313	19	10	14	8	8	10	protein Jade-2-like
PKD2L1	6	4	5	4	6	10	polycystic kidney disease 2-like 1
LOC104917039	7	13	4	12	7	10	cohesin subunit SA-3-like
IL17REL	14	17	10	19	11	10	interleukin 17 receptor E
LOC100546507	7	10	7	14	16	10	sodium channel protein type 2 subunit alpha
LOC104911604	20	15	14	19	9	10	uncharacterized LOC104911604
LOC104914948	12	11	10	13	14	10	microtubule-associated serine/threonine-protein kinase 4-like
MFS2B	21	5	21	7	18	10	major facilitator superfamily domain containing 2B
LOC104917505	19	9	12	9	8	10	uncharacterized LOC104917505
LOC104914393	9	8	6	9	11	10	uncharacterized LOC104914393
AICDA	7	13	4	6	3	10	activation-induced cytidine deaminase
GFRA3	12	6	10	9	8	10	GDNF family receptor alpha 2
LOC104911560	6	5	9	6	5	10	uncharacterized LOC104911560
LOC100542046	19	10	11	12	13	10	neuronal acetylcholine receptor subunit alpha-7-like
HPGDS	18	7	9	10	15	10	hydroxyprostaglandin dehydrogenase 15-(NAD)
LOC104910989	14	14	12	12	9	10	uncharacterized LOC104910989
LOC104911536	5	11	8	12	6	10	uncharacterized LOC104911536
LOC104910139	7	10	11	9	7	10	uncharacterized LOC104910139
LOC104912929	9	10	10	7	5	10	rhophilin-2-like
PHACTR1	7	5	4	6	5	10	phosphatase and actin regulator 1
LOC104910197	3	4	4	6	4	10	uncharacterized LOC104910197
NKAIN3	10	9	11	10	6	10	Na ⁺ /K ⁺ transporting ATPase interacting 3
LOC104914688	10	9	14	9	13	10	minor histocompatibility protein HA-1-like
P2RX1	21	28	14	20	21	10	purinergic receptor P2X, ligand-gated ion channel, 1
FAM131A	7	6	10	8	9	10	family with sequence similarity 129, member B
LOC104911144	8	7	8	11	7	10	uncharacterized LOC104911144
LOC104913918	10	8	8	7	13	10	uncharacterized LOC104913918

IGFBP1	10	15	13	15	7	10	insulin-like growth factor binding protein, acid labile subunit
LOC104912080	7	12	9	12	13	10	uncharacterized LOC104912080
LOC100547276	5	6	7	3	7	10	protein FAM13C-like
LOC104913745	9	6	8	7	5	10	protein shisa-6 homolog
OMG	14	9	14	15	18	10	oligodendrocyte myelin glycoprotein
LOC104912322	5	13	12	8	7	10	uncharacterized LOC104912322
FGF10	13	10	11	11	9	10	FYVE, RhoGEF and PH domain containing 6
TENM1	9	10	9	11	6	10	teneurin transmembrane protein 1
LOC104911456	13	14	17	14	13	10	uncharacterized LOC104911456
DGKB	13	17	11	12	14	10	DGCR8 microprocessor complex subunit
LOC100538873	27	17	21	20	14	10	hematopoietic lineage cell-specific protein-like
LOC104911017	9	6	13	9	12	10	uncharacterized LOC104911017
CLDN20	8	7	5	9	10	10	claudin 2
LOC104910391	9	12	16	14	9	10	leucine-rich repeat and coiled-coil domain-containing protein 1-like
LOC100545878	19	13	16	10	22	10	ectonucleotide pyrophosphatase/phosphodiesterase family member 6
LOC104910123	6	10	6	9	7	10	uncharacterized LOC104910123
LOC104915243	11	11	16	10	6	10	fibrillin-2-like
LOC100542157	17	10	8	8	9	10	Nanog homeobox
CCKBR	5	4	7	9	3	10	cholecystokinin A receptor
LOC104913134	11	6	4	6	9	10	uncharacterized LOC104913134
LOC100543080	6	8	7	6	5	10	apratxin-like
LOC104917014	20	12	24	21	17	10	E3 ubiquitin-protein ligase HUWE1-like
SLC12A3	14	10	7	6	8	10	solute carrier family 12 (sodium/chloride transporter), member 3
ANKRD60	15	8	10	12	10	10	ankyrin repeat domain 60
BMP5	3	11	13	4	12	10	bone morphogenetic protein 5
LOC100549046	13	9	14	7	8	10	regucalcin-like
LOC104917420	12	9	9	9	7	10	uncharacterized LOC104917420
LOC104911590	8	16	18	16	8	10	uncharacterized LOC104911590
LMBR1L	16	14	18	10	9	10	limb development membrane protein 1
LOC104917243	10	15	9	16	8	10	killer cell immunoglobulin-like receptor 3DL1
LOC104917595	16	25	11	15	16	10	maestro heat-like repeat-containing protein family member 2B
LOC104909647	10	8	7	9	8	10	uncharacterized LOC104909647
GPR85	19	15	18	15	12	10	G protein-coupled receptor 83
LOC104910754	10	12	9	11	11	10	rho GTPase-activating protein 7-like
LOC104913488	13	15	16	11	13	10	caskin-1-like
IRF4	6	6	9	6	7	10	interferon regulatory factor 2 binding protein-like
LOC104913579	9	11	12	11	5	10	leucine-rich repeat-containing protein 74B-like
LOC104912316	10	8	9	3	5	10	pancreatic alpha-amylase-like
LANCL3	16	9	17	10	9	10	LanC lantibiotic synthetase component C-like 2 (bacterial)
TSHR	8	7	6	10	9	10	thyroid stimulating hormone receptor
LOC104916674	10	6	12	0	7	10	outer dense fiber protein 3-like
LOC104911547	13	16	13	8	10	10	uncharacterized LOC104911547
LOC104910563	11	14	34	12	17	10	SH2 domain-containing protein 4A-like
LOC104909536	10	10	10	6	7	10	short-chain dehydrogenase/reductase family 9C member 7-like
LOC104912572	4	10	5	5	4	10	uncharacterized LOC104912572
LOC104916060	11	15	6	14	10	10	uncharacterized LOC104916060
CIB3	3	7	8	7	7	10	calcium and integrin binding family member 2
LOC104916158	15	12	20	10	15	10	uncharacterized LOC104916158
LOC100540882	4	7	13	4	5	10	olfactory receptor 14J1-like
LOC104909535	23	14	12	10	3	10	uncharacterized LOC104909535
LOC104914642	18	8	14	9	11	10	platelet glycoprotein Ib alpha chain-like
RUNDC3A	21	7	11	9	18	10	RUN domain containing 3A
FAM83H	11	8	9	6	7	10	family with sequence similarity 83, member G
LOC100543064	10	8	14	11	12	10	cell division cycle 7-related protein kinase
PRDM8	11	10	8	6	6	10	PR domain containing 8
SVOP	11	11	10	15	9	10	SV2 related protein homolog (rat)
ADAM22	21	21	20	15	19	10	ADAM metalloproteinase domain 22
RHBDL1	9	8	4	11	5	10	rhomboid, veinlet-like 1 (Drosophila)
LOC104909320	9	4	3	6	7	10	von Willebrand factor A domain-containing protein 5B1-like
LOC104911388	20	9	10	8	10	10	uncharacterized LOC104911388
LOC104915465	13	10	15	17	16	10	C-C chemokine receptor type 2-like
LOC104914342	12	14	17	15	14	10	uncharacterized LOC104914342
LOC104913629	11	13	5	13	12	10	uncharacterized LOC104913629
LOC104915141	9	12	8	11	9	10	tyrosine-protein kinase transmembrane receptor ROR2-like
LOC100548022	12	13	9	12	11	10	beta-1,4-galactosyltransferase 3-like
LOC100539461	5	8	7	9	9	10	solute carrier family 22 member 15-like
LOC100545877	6	8	13	16	5	10	olfactory receptor 52I2-like
LOC104914223	13	8	15	11	12	10	uncharacterized LOC104914223
RNF182	27	6	18	7	23	10	ring finger protein 182
LOC104909830	29	13	14	17	13	10	protein FAM184A-like
LOC104910269	10	8	9	5	12	10	uncharacterized LOC104910269
LOC100549312	3	3	6	5	3	10	protein FAM46A pseudogene

LOC100545429	15	10	12	14	5	10	macrophage mannose receptor 1-like
MLKL	13	7	10	23	8	10	mixed lineage kinase domain-like
SLC6A1	6	12	9	10	7	10	solute carrier family 6 (neurotransmitter transporter), member 1
LOC104912525	7	10	3	7	4	10	probable cation-transporting ATPase 13A4
HMGCS2	10	15	11	16	20	10	3-hydroxy-3-methylglutaryl-CoA synthase 1 (soluble)
IGSF9B	21	12	15	8	12	10	immunoglobulin superfamily, member 9
LOC104909746	10	7	16	8	8	10	synaptotagmin-2-like
CD274	16	9	8	12	11	10	CD247 molecule
LOC104909669	7	10	7	10	10	10	kinesin-like protein KIF28P
LOC104912040	11	10	14	14	6	10	uncharacterized LOC104912040
LOC104915647	15	7	19	9	15	10	adenylate cyclase type 10-like
LOC104912475	7	6	12	7	6	10	E3 ubiquitin-protein ligase Rnf220-like
ANKRD24	6	7	5	9	12	10	ankyrin repeat domain 24
TMEM154	12	6	8	9	6	10	transmembrane protein 154
LOC100544156	13	10	11	10	12	10	single-stranded DNA-binding protein 3
LOC104916384	9	9	12	6	9	10	ankyrin repeat domain-containing protein 34C-like
LOC104913097	7	4	6	6	5	10	serine/arginine repetitive matrix protein 1-like
OSTN	33	19	14	23	30	10	osteocrin
LOC104913127	9	18	8	9	16	10	HAUS augmin-like complex subunit 3
LOC104914226	3	6	2	22	1	10	disintegrin and metalloproteinase domain-containing protein 28-like
LOC104910559	12	7	10	13	8	10	uncharacterized LOC104910559
LOC100543612	9	8	12	11	7	10	protein cordon-bleu-like
LOC104917113	15	3	13	6	15	10	adenylate cyclase type 10-like
FBXO16	6	8	8	6	3	10	F-box protein 11
LOC100550948	12	7	11	17	7	10	interferon alpha-inducible protein 27-like protein 2B
NCAM2	9	13	14	12	7	10	neural cell adhesion molecule 2
LOC104911159	7	9	9	8	6	10	uncharacterized LOC104911159
LOC104912295	15	18	13	13	11	10	uncharacterized LOC104912295
LOC104909691	20	18	9	20	5	10	uncharacterized LOC104909691
TRPM1	5	10	3	14	22	10	transient receptor potential cation channel, subfamily M, member 1
LOC104913287	4	8	13	14	8	10	uncharacterized LOC104913287
LOC104916340	22	14	17	14	33	10	gastrula zinc finger protein XICGF49.1-like
LOC104913516	18	8	17	13	17	10	integrin alpha-D-like
LOC104910271	7	7	8	10	14	10	uncharacterized LOC104910271
LOC104911033	16	11	15	7	11	10	pleckstrin homology domain-containing family A member 7-like
LOC104915036	15	10	16	8	13	10	SH3 domain containing GRB2 like 2, endophilin A1
NRTN	11	16	18	14	12	10	neurturin
TRAPPC3L	4	8	6	4	2	10	trafficking protein particle complex 3-like
KMO	6	6	8	11	8	10	kelch-like family member 8
LOC104911339	16	8	10	7	11	10	sodium channel protein type 5 subunit alpha-like
SLC4A5	10	7	8	6	10	10	solute carrier family 4 (sodium bicarbonate cotransporter), member 5
LOC104910118	7	8	8	10	14	10	uncharacterized LOC104910118
PROM2	15	11	10	13	14	10	prominin 2
LOC104911187	13	14	9	17	17	10	uncharacterized LOC104911187
FSCN2	34	15	22	8	20	10	fibrinogen silencer binding protein
LOC104909684	13	14	9	19	18	10	uncharacterized LOC104909684
LOC104915721	14	10	5	10	10	10	hepatic lectin-like
LOC104910234	6	8	7	8	5	10	F-box only protein 15
LOC104910114	9	11	10	8	8	10	uncharacterized LOC104910114
LOC104914408	13	8	9	13	10	10	signaling lymphocytic activation molecule-like
GALR2	10	13	12	14	16	10	galanin receptor 1
LOC104910728	10	11	3	6	5	10	uncharacterized LOC104910728
LOC104912173	6	9	11	9	6	10	uncharacterized LOC104912173
LOC104913686	18	18	12	14	18	10	uncharacterized LOC104913686
LOC104912402	12	11	10	10	8	10	uncharacterized LOC104912402
LOC104914652	21	9	13	12	19	10	platelet glycoprotein Ib alpha chain-like
LOC100539821	25	14	17	13	26	10	mitochondrial chaperone BCS1
LOC100539633	10	18	10	20	16	10	dickkopf-related protein 3-like
CHRM3	6	7	6	8	2	10	cholinergic receptor, muscarinic 2
LOC100546426	7	10	7	8	11	10	ubiquitin-like modifier-activating enzyme 1
ECE2	11	5	5	6	8	10	endothelin converting enzyme 1
LOC104914219	10	6	5	8	5	10	uncharacterized LOC104914219
LOC104915538	17	25	22	9	16	10	uncharacterized LOC104915538
DUOX2	10	9	6	6	6	10	deoxythymidylate kinase (thymidylate kinase)
KRT80	12	10	10	22	43	10	keratin 8
SUSD4	8	13	9	13	13	10	sushi domain containing 4
TLE2	10	10	7	7	14	10	transducin-like enhancer of split 2
RHO	13	9	6	8	12	10	rhodopsin
LRRN2	12	13	11	10	12	10	leucine rich repeat neuronal 2
LOC104913797	14	14	16	11	9	10	uncharacterized LOC104913797
IDO2	7	15	6	4	15	10	idnK, gluconokinase homolog (E. coli)
LOC104910229	17	10	7	9	12	10	uncharacterized LOC104910229
LOC104917211	11	16	13	10	13	10	protein patched homolog 1-like
LOC104916711	22	12	12	16	21	10	integrin alpha-IIb-like

ADARB2	42	7	33	6	7	10	adenosine deaminase, RNA-specific, B2 (non-functional)
CRYBB3	16	13	13	9	18	10	crystallin, beta B2
LOC104916024	14	11	14	12	8	9	uncharacterized LOC104916024
LOC104917437	5	7	8	5	4	9	glypican-6-like
CDK14	7	8	14	11	10	9	cyclin-dependent kinase 13
LOC104910503	9	15	14	16	13	9	uncharacterized LOC104910503
LOC100547726	4	10	11	12	4	9	claudin-22-like
LOC104909922	10	11	7	8	7	9	unconventional myosin-VI-like
LOC104914657	5	7	6	9	5	9	granzyme G-like
LOC100541314	6	5	10	7	7	9	ras-related and estrogen-regulated growth inhibitor-like
LOC104915627	8	15	6	15	5	9	protein MIS12 homolog
LOC100540476	10	9	7	10	12	9	ELKS/Rab6-interacting/CAST family member 1
LAMP3	12	8	14	11	16	9	lysosomal-associated membrane protein 2
LOC104913375	12	12	13	13	18	9	uncharacterized LOC104913375
LOC100542196	8	5	6	5	9	9	uncharacterized LOC100542192
WFIKK2							WAP, follistatin/kazal, immunoglobulin, kunitz and netrin domain
	19	5	17	9	7	9	containing 2
AIM1	42	14	20	10	15	9	absent in melanoma 1
LOC104913459	9	7	6	7	5	9	sorting nexin-29-like
PLB1	16	10	16	14	14	9	phospholipase B1
LOC104914917	8	12	10	10	9	9	zinc finger SWIM domain-containing protein 6-like
LOC104915462	13	13	16	18	13	9	low-density lipoprotein receptor-related protein 1-like
LOC104915524	20	12	19	4	16	9	uncharacterized LOC104915524
LOC104909398	8	11	7	10	9	9	GRB2-associated-binding protein 2-like
LOC104914973	8	5	8	6	7	9	uncharacterized LOC104914973
LOC104911438	11	19	11	14	7	9	cubilin-like
CSPG5	18	16	16	14	16	9	chondroitin sulfate proteoglycan 4
LOC104917017	2	11	6	22	19	9	uncharacterized LOC104917017
IQCG	13	15	17	11	10	9	IQ motif containing E
LOC104913810	8	8	2	6	5	9	uncharacterized LOC104913810
LOC104915845	8	12	10	10	11	9	uncharacterized LOC104915845
GDPGP1							
	13	14	18	16	16	9	glycerophosphodiester phosphodiesterase domain containing 5
LOC100550137	22	21	17	23	23	9	interferon lambda-3
RGS6	7	11	5	11	12	9	regulator of G-protein signaling 6
SOSTDC1	17	20	18	8	13	9	sclerostin domain containing 1
IL12A	10	6	5	7	4	9	interleukin 11 receptor, alpha
NDNF	11	15	11	13	16	9	neuron-derived neurotrophic factor
LOC100543562	18	10	15	10	9	9	uncharacterized LOC100543556
MANEAL	19	13	13	12	13	9	mannosidase, endo-alpha-like
LOC100542220	27	25	20	23	18	9	estradiol 17-beta-dehydrogenase 11-like
LOC104913389	7	7	11	10	8	9	uncharacterized LOC104913389
STAT4	14	7	13	8	6	9	signal transducer and activator of transcription 4
LOC104911357	7	10	5	14	8	9	uncharacterized LOC104911357
LOC104915496	12	8	13	9	6	9	uncharacterized LOC104915496
LOC100551109	10	12	6	14	10	9	rap guanine nucleotide exchange factor 4
LOC104913204	3	4	14	7	15	9	uncharacterized LOC104913204
CLCF1	11	11	12	6	12	9	chloride channel CLIC-like 1
GNAO1							guanine nucleotide binding protein (G protein), alpha inhibiting activity
	14	7	16	9	6	9	polypeptide 2
NOXA1	11	12	16	12	6	9	NADPH oxidase activator 1
LOC104916203							
	8	5	9	6	7	9	mediator of RNA polymerase II transcription subunit 25-like
LOC104916003	12	3	14	6	8	9	adenylate cyclase type 10-like
MSX1	10	9	14	6	6	9	msh homeobox 1
LOC104915916	11	6	18	10	22	9	sialoadhesin-like
LOC104917583	10	7	9	8	4	9	neurobeachin-like
LOC100539174	3	0	9	2	1	9	butyrophilin subfamily 1 member A1-like
LOC104912669	14	16	12	9	19	9	uncharacterized LOC104912669
LOC104912995	3	8	4	17	3	9	uncharacterized LOC104912995
LOC104917003	8	12	8	10	6	9	zonadhesin-like
LOC104915672	10	12	11	5	16	9	notchless protein homolog 1-like
LOC100546469	9	6	2	9	6	9	cadherin-8-like
VWA2	14	8	13	11	12	9	von Willebrand factor A domain containing 2
LOC104909246	17	12	15	12	14	9	neurolysin, mitochondrial-like
UCN3	19	10	14	11	5	9	urocortin 3
LOC100543887	10	8	7	8	7	9	sodium/hydrogen exchanger 9-like
RGS21	9	7	9	8	15	9	regulator of G-protein signaling 21
LOC104910966	14	6	8	6	9	9	ras-related protein Rab-15-like
LOC104917473	10	9	9	8	11	9	uncharacterized LOC104917473
LOC104916578	9	11	10	9	11	9	uncharacterized LOC104916578
LOC104914549	11	7	6	6	10	9	von Willebrand factor A domain-containing protein 5A-like
SEC16B	10	12	14	14	7	9	SEC16 homolog B (S. cerevisiae)
LOC104916221	17	19	8	13	14	9	uncharacterized LOC104916221
MUC13	4	9	7	8	6	9	mucin 13, cell surface associated
LOC104916536	14	9	10	14	12	9	uncharacterized LOC104916536
C1H11orf97	16	8	8	8	11	9	chromosome 1 open reading frame, human C11orf87
LOC104913837	11	10	11	9	6	9	uncharacterized LOC104913837
TNIP3	9	3	4	34	2	9	TNFAIP3 interacting protein 3

LOC104912176	9	7	9	7	8	9	connector enhancer of kinase suppressor of ras 2-like
LOC104913767	11	11	17	13	9	9	brain-specific angiogenesis inhibitor 1-associated protein 2-like
LOC104913601	5	6	12	7	12	9	uncharacterized LOC104913601
LOC104910928	10	8	12	9	10	9	uncharacterized LOC104910928
LOC100545035	12	25	2	9	8	9	keratin, type II cytoskeletal 75-like
LOC100546659	6	5	8	6	7	9	serine-rich coiled-coil domain-containing protein 2-like
LOC104916822	18	10	16	10	12	9	proline-rich protein 2-like
LOC104914895	8	6	10	6	8	9	uncharacterized LOC104914895
GPR148	3	16	5	9	2	9	G protein-coupled receptor 146
LOC104911641	11	10	15	13	10	9	dynein heavy chain 7, axonemal-like
KCNA6	12	13	14	9	11	9	potassium voltage-gated channel, shaker-related subfamily, member 5
LOC104916271	4	5	6	9	8	9	osteocalcin-like
LOC100545895	20	18	26	11	16	9	ras-like protein family member 11A-like
HOXC5	9	5	9	5	10	9	homeobox C12
APOD	9	10	4	10	5	9	apolipoprotein D
CACNA1E	20	12	13	12	9	9	calcium channel, voltage-dependent, L type, alpha 1D subunit
LOC104917611	6	11	9	12	8	9	cytoplasmic dynein 2 heavy chain 1-like
LOC104911903	1	4	2	4	1	9	uncharacterized LOC104911903
ERICH6	7	9	10	6	6	9	glutamate-rich 3
TTC29	10	8	9	10	5	9	tetratricopeptide repeat domain 29
LOC104913492	9	7	12	8	11	9	voltage-dependent T-type calcium channel subunit alpha-1H-like
LOC104914326	8	13	8	7	6	9	brain-specific angiogenesis inhibitor 2-like
LOC104913164	8	22	8	8	9	9	uncharacterized LOC104913164
DCSTAMP	15	6	8	10	12	9	DC-STAMP domain containing 1
AMH	10	5	8	5	5	9	anti-Mullerian hormone
LOC104913553	9	9	8	7	6	9	uncharacterized LOC104913553
LOC100549167	8	13	15	7	5	9	cytochrome P450 4V2
REC114	13	7	8	7	5	9	REC114 meiotic recombination protein
LOC104911333	6	4	7	8	8	9	uncharacterized LOC104911333
LOC104914254	6	9	7	8	6	9	uncharacterized LOC104914254
LOC104917234	5	2	2	2	2	9	uncharacterized LOC104917234
SNAPC3	9	6	9	8	7	9	small nuclear RNA activating complex, polypeptide 3, 50kDa
LOC104916979	9	15	6	10	2	9	uncharacterized LOC104916979
GRIK4	10	8	9	8	6	9	glutamate receptor, ionotropic, kainate 3
LOC104913842	9	10	12	5	6	9	myosin-7-like
LOC100548433	0	5	1	4	25	9	high affinity choline transporter 1-like
KCTD16	6	2	6	1	2	9	potassium channel tetramerization domain containing 15
LOC100548864	3	3	2	9	5	9	protein DDX26B-like
LOC104916410	4	4	2	3	0	9	uncharacterized LOC104916410
LOC104912135	14	5	7	10	10	9	uncharacterized LOC104912135
LOC104909308	9	5	14	8	8	9	sex comb on midleg-like protein 4
SHISA9	9	6	7	9	6	9	shisa family member 9
LOC104911025	5	3	10	23	27	9	otogelin-like
PLD4	9	5	9	5	6	9	phospholipase D family, member 4
LOC104910403	9	19	12	10	7	9	uncharacterized LOC104910403
LOC104913746	6	14	13	12	5	9	uncharacterized LOC104913746
LOC100546961	9	7	10	5	6	9	gamma-2-syntrophin-like
LOC104909686	9	11	8	17	12	9	uncharacterized LOC104909686
RXRG	9	15	9	11	12	9	retinoid X receptor, gamma
LOC104915648	15	9	9	15	8	9	probable JmJC domain-containing histone demethylation protein 2C
MXK	8	9	18	8	2	9	mohawk homeobox
LOC100542160	8	5	6	8	16	9	guanylate cyclase soluble subunit alpha-2
LOC104911434	3	8	6	15	14	9	uncharacterized LOC104911434
LOC104917578	6	7	6	11	10	9	microtubule-associated tumor suppressor candidate 2-like
TMEM156	28	11	18	15	21	9	transmembrane protein 156
LOC104914286	9	9	5	12	6	9	CUB and sushi domain-containing protein 2-like
LOC100548083	11	6	7	7	5	9	uncharacterized LOC100548078
BDNF	9	13	5	11	6	9	brain-derived neurotrophic factor
SALL1	7	8	13	3	3	9	spalt-like transcription factor 1
LOC104914906	9	9	7	8	6	9	zinc finger SWIM domain-containing protein 6-like
LOC104909836	14	7	12	10	16	9	uncharacterized LOC104909836
LHFPL3	14	12	13	17	8	9	lipoma HMGIC fusion partner-like 2
LOC100542183	4	9	6	5	5	9	putative glycerol kinase 5
LOC104910473	9	6	9	5	9	9	thyroglobulin-like
LOC104910605	4	2	3	4	4	9	uncharacterized LOC104910605
LOC104915428	2	9	5	12	4	9	maestro heat-like repeat-containing protein family member 2B
LOC100548914	15	12	16	18	12	9	cytoskeleton-associated protein 5
EXPH5	27	17	17	13	30	9	exosome component 9
PMCH	11	6	19	9	4	9	pro-melanin-concentrating hormone
LOC104915786	16	10	22	13	18	9	uncharacterized LOC104915786
LOC104915902	8	10	7	7	9	9	uncharacterized LOC104915902
LOC104916838	11	13	10	7	8	9	zinc finger protein 239-like

TECTA	4	5	9	9	9	9	tectorin alpha
LOC104915251	9	8	10	9	9	9	multiple C2 and transmembrane domain-containing protein 1
SBK1	11	9	8	9	9	9	SH3 domain binding kinase 1
LOC104916568	8	73	21	10	9	9	myosin-8-like
TSGA10	4	8	8	6	7	9	testis specific, 10
LOC100542202	2	3	5	3	5	9	UPF0505 protein C16orf62-like
USP50	15	8	13	10	7	9	ubiquitin specific peptidase 50
LOC104915697	11	12	9	10	8	9	uncharacterized LOC104915697
LOC104912481	5	6	9	11	8	9	uncharacterized LOC104912481
LOC104913232	8	9	9	8	5	9	proteinase-activated receptor 3-like
LOC104916270	7	6	2	7	5	9	POU domain, class 3, transcription factor 3
GPR63	13	6	8	4	10	9	G protein-coupled receptor 62
LOC100540290	8	12	5	8	17	9	interleukin-12 receptor subunit beta-2-like
LOC104912977	8	8	13	6	9	9	uncharacterized LOC104912977
TTC39B	14	10	9	10	11	8	tetratricopeptide repeat domain 39B
LOC104912302	12	9	10	8	8	8	uncharacterized LOC104912302
WNT10A	15	10	9	17	19	8	wingless-type MMTV integration site family, member 10A
KL	7	5	5	8	17	8	KIT ligand
LOC104916930	9	14	6	13	6	8	uncharacterized LOC104916930
LOC104916815	8	8	8	7	5	8	mitogen-activated protein kinase 7-like
LYPD6	10	10	5	8	7	8	LY6/PLAUR domain containing 6
CNR2	6	7	11	6	9	8	cannabinoid receptor 1 (brain)
LOC104912752	14	6	5	10	16	8	mucin-5B-like
LOC100546521	20	17	21	20	14	8	TBC1 domain family member 24-like
UPK1B	17	2	7	4	4	8	uroplakin 1B
APOA4	11	9	11	7	5	8	apolipoprotein A-IV
LOC104914298	15	9	15	6	13	8	uncharacterized LOC104914298
LOC104909906	9	8	16	9	12	8	uncharacterized LOC104909906
LOC104909846	12	20	17	28	20	8	coiled-coil domain-containing protein 162-like
LOC100540394	17	7	13	11	9	8	DNA annealing helicase and endonuclease ZRANB3-like
LOC104909656	13	10	15	12	8	8	uncharacterized LOC104909656
LOC104914544	10	15	16	12	11	8	uncharacterized LOC104914544
LOC100546791	10	5	7	5	10	8	methylcrotonoyl-CoA carboxylase beta chain, mitochondrial-like
EFCAB2	6	12	9	7	1	8	EF-hand calcium binding domain 14
TRIM67	14	16	25	11	15	8	tripartite motif containing 67
LOC104913312	11	7	8	9	7	8	putative E3 ubiquitin-protein ligase SH3RF2
LOC100541890	6	7	10	6	7	8	ketimine reductase mu-crystallin-like
LOC104914881	10	8	7	5	3	8	uncharacterized LOC104914881
LOC104913880	16	8	13	9	10	8	peripheral-type benzodiazepine receptor-associated protein 1-like
PLEKHD1	8	4	9	7	10	8	pleckstrin homology domain containing, family D (with coiled-coil domains) member 1
LOC104915335	7	5	20	3	52	8	uncharacterized LOC104915335
LOC104911020	22	13	3	1256	12	8	serum amyloid A protein-like
LOC104913111	4	9	7	7	7	8	uncharacterized LOC104913111
LOC100543400	2	18	15	2	4	8	gamma-secretase-activating protein
LOC104914513	21	8	12	11	18	8	TRAF3-interacting JNK-activating modulator
HGD	4	8	4	5	9	8	hes-related family bHLH transcription factor with YRPW motif-like
GLRA4	11	15	8	11	4	8	glycine receptor, alpha 2
GPR61	5	5	4	3	3	8	G protein-coupled receptor 6
ATP13A5	7	8	12	9	14	8	ATPase type 13A5
ACMSD	9	6	9	4	5	8	aminocarboxymuconate semialdehyde decarboxylase
LOC104916036	10	6	5	4	2	8	zinc finger and BTB domain-containing protein 7B-like
LOC104915676	3	4	2	3	1	8	uncharacterized LOC104915676
LOC104913795	7	8	11	15	3	8	uncharacterized LOC104913795
KCNQ1	16	12	12	11	10	8	potassium intermediate/small conductance calcium-activated channel, subfamily N, member 2
LOC100549042	2	3	5	4	4	8	transmembrane protein 136-like
LOC100547769	12	22	17	20	8	8	eukaryotic translation initiation factor 4B-like
LOC100548579	36	5	31	6	13	8	transcription intermediary factor 1-alpha
LOC104913964	11	15	8	17	12	8	EF-hand calcium-binding domain-containing protein 5-like
GUCA1C	2	9	6	5	1	8	guanylate cyclase activator 1B (retina)
TGFA	6	7	11	7	4	8	transforming growth factor, alpha
LOC104917554	4	3	4	5	1	8	uncharacterized LOC104917554
FOXC1	13	12	12	11	13	8	forkhead box B1
PLIN1	168	193	33	290	53	8	perilipin 1
LOC104913430	11	6	8	5	10	8	uncharacterized LOC104913430
LOC104909386	4	2	5	7	5	8	uncharacterized LOC104909386
LOC104909736	10	7	13	8	9	8	uncharacterized LOC104909736
ASPA	11	12	16	10	19	8	aspartoacylase
LOC104913643	7	10	9	7	10	8	uncharacterized LOC104913643
SLC6A14	4	6	3	9	3	8	solute carrier family 6 (amino acid transporter), member 14
LOC104915169	11	6	13	8	15	8	uncharacterized LOC104915169
LOC104909461	3	4	5	5	4	8	uncharacterized LOC104909461
LOC104911403	19	11	12	12	14	8	islet cell autoantigen 1-like
SHANK3	15	10	15	11	13	8	SH3 and multiple ankyrin repeat domains 3

RAB31	7	10	4	6	8	8	RAB31, member RAS oncogene family
RNF32	14	9	19	11	19	8	ring finger protein 32
LOC104911854	10	10	9	12	4	8	nuclear receptor subfamily 4 group A member 2-like
LOC100544870	7	7	5	7	5	8	alpha-1-antiproteinase-like
LOC104914378	9	8	8	8	8	8	von Willebrand factor A domain-containing protein 5A-like
LOC104910430	6	9	7	3	5	8	uncharacterized LOC104910430
LOC104910343	5	5	4	5	5	8	uncharacterized LOC104910343
LOC104909292	8	8	16	9	8	8	EF-hand domain-containing family member C2-like
LOC104912811	10	10	12	8	10	8	protein unc-13 homolog C-like
LOC100545471	6	4	4	4	5	8	laminin subunit alpha-2-like
LOC104916218	2	8	7	14	7	8	uncharacterized LOC104916218
LOC104917105	25	12	20	16	21	8	heat shock factor protein 1-like
LOC104912095	9	12	9	16	12	8	uncharacterized LOC104912095
METTL7A	8	22	6	23	5	8	methyltransferase like 7A
LOC104917475	10	11	8	16	9	8	uncharacterized LOC104917475
LOC104915620	6	5	6	6	6	8	adenylate cyclase type 10-like
IL31RA	9	8	11	7	8	8	interleukin 2 receptor, gamma
LOC104911601	9	4	8	8	8	8	uncharacterized LOC104911601
LOC104910619	11	5	6	8	15	8	uncharacterized LOC104910619
LOC104911224	2	4	7	4	5	8	uncharacterized LOC104911224
LOC100542775	10	11	12	7	9	8	membrane-associated guanylate kinase, WW and PDZ domain-containing protein 2
MAB21L2	3	5	8	4	2	8	mab-21-like 2 (C. elegans)
SMAD7	14	11	9	7	12	8	SMAD family member 7
LOC104910578	8	5	7	8	3	8	extracellular matrix protein FRAS1-like
LOC100550174	5	6	7	8	6	8	zinc finger X-chromosomal protein-like
GJB1	17	20	9	13	9	8	gap junction protein, alpha 9, 59kDa
LOC104913555	5	3	6	6	6	8	gamma-glutamyltranspeptidase 1-like
LOC104916455	8	11	13	9	8	8	arylsulfatase E-like
LOC104914073	12	15	9	12	7	8	uncharacterized LOC104914073
LRRTM2	13	8	9	6	8	8	leucine rich repeat transmembrane neuronal 2
LRRC48	2	10	10	10	6	8	leucine rich repeat containing 48
LOC100551379	10	12	9	9	11	8	lateral signaling target protein 2 homolog
LOC104917052	4	8	9	10	11	8	protein patched homolog 1-like
LOC104912712	13	9	13	10	12	8	uncharacterized LOC104912712
LOC104914167	14	10	10	13	13	8	agrin-like
LOC104909825	13	9	11	12	12	8	uncharacterized LOC104909825
LOC100544297	15	8	12	7	7	8	dedicator of cytokinesis protein 1-like
GRAP2	14	11	13	6	6	8	GRB2-related adaptor protein
LOC104914036	3	9	8	5	8	8	phosphatase and actin regulator 3-like
LOC104911609	5	9	2	5	4	8	uncharacterized LOC104911609
LOC104914982	12	8	7	9	9	8	rho guanine nucleotide exchange factor 28-like
PRRG4	3	10	12	12	8	8	proline rich Gla (G-carboxyglutamic acid) 4 (transmembrane)
LOC104915367	7	2	7	3	10	8	adenylate cyclase type 10-like
POU3F1	12	13	9	9	7	8	POU class 3 homeobox 1
LOC104910024	10	5	8	9	7	8	uncharacterized LOC104910024
GNA14	10	7	9	10	8	8	guanine nucleotide binding protein (G protein), alpha 13
LOC104916382	18	7	17	9	14	8	zinc finger protein ZFPM1-like
CLVS2	12	13	14	9	10	8	clavesin 1
LOC100542772	6	9	7	6	4	8	olfactory receptor 14A16-like
LOC100547334	11	13	14	13	14	8	transmembrane 9 superfamily member 2-like
LOC104917558	12	8	11	10	8	8	neurobeachin-like
GIMAP8	7	6	5	3	5	8	gastric intrinsic factor (vitamin B synthesis)
LOC104911914	6	5	5	8	2	8	rho-related BTB domain-containing protein 1-like
MCOLN2	9	11	7	5	4	8	mucolipin 2
LOC104913659	9	6	15	9	20	8	uncharacterized LOC104913659
FAM169A	16	10	12	11	21	8	family with sequence similarity 168, member B
LOC104911611	8	7	10	3	8	8	uncharacterized LOC104911611
LOC104913154	7	2	7	5	5	8	uncharacterized LOC104913154
TNFSF8	10	9	9	7	4	8	tumor necrosis factor (ligand) superfamily, member 8
LOC104913675	9	12	7	6	3	8	uncharacterized LOC104913675
LOC104911817	10	7	8	10	12	8	uncharacterized LOC104911817
CNGB1	6	6	6	5	7	8	cyclic nucleotide gated channel alpha 4
LMX1B	9	14	5	7	15	8	LIM homeobox transcription factor 1, alpha
LOC104909663	3	4	4	4	2	8	WD repeat-containing protein 64-like
LRAT	9	12	16	3	4	8	lecithin retinol acyltransferase (phosphatidylcholine--retinol O-acyltransferase)
LOC104911954	16	8	20	8	11	8	uncharacterized LOC104911954
KCNA4	11	14	5	18	6	8	potassium voltage-gated channel, shaker-related subfamily, member 2
LOC104916164	2	4	4	2	4	8	uncharacterized LOC104916164
LEF1	10	5	10	4	5	8	leukocyte cell-derived chemotaxin 2
RUNX1	57	9	38	15	17	8	runt-related transcription factor 1
KRT8	7	12	10	10	12	8	keratin 23 (histone deacetylase inducible)
SLC10A4	10	9	11	6	11	8	solute carrier family 10, member 4
LOC104913230	10	5	4	5	8	8	uncharacterized LOC104913230
LOC104913622	8	7	11	7	11	8	HLA class II histocompatibility antigen, DM beta chain-like
SCG2	7	6	9	4	2	8	secretogranin II

PARD6A	12	14	7	9	12	8	par-6 family cell polarity regulator alpha
DMRT1	13	6	8	4	4	8	dentin matrix acidic phosphoprotein 1
SLC12A8	5	6	10	8	7	8	solute carrier family 12, member 8
LOC104913321	8	7	10	6	6	8	uncharacterized LOC104913321
LOC104914038	2	3	4	3	3	8	uncharacterized LOC104914038
PCDH20	5	5	6	5	4	8	protocadherin 20
LOC104913760	11	8	8	4	10	8	uncharacterized protein C16orf45 homolog
MLN	4	9	5	5	7	8	motilin
LOC104910091	3	5	4	5	3	8	uncharacterized LOC104910091
CCDC183	8	9	5	12	13	8	coiled-coil domain containing 181
LOC104917370	7	6	6	5	5	8	zinc finger protein 282-like
EML5	17	16	20	11	15	7	echinoderm microtubule associated protein like 4
LOC104912699	5	5	3	9	5	7	mucin-4-like
LOC100545285	6	3	4	4	3	7	zona pellucida sperm-binding protein 3-like
ESPNL	5	10	9	9	5	7	espin
LOC104914498	13	9	11	6	7	7	heat shock factor 2-binding protein-like
LOC100550580	3	8	7	15	3	7	ROS proto-oncogene 1, receptor tyrosine kinase
GHRL	6	5	6	5	3	7	growth hormone releasing hormone receptor
TMEM171	10	6	10	7	16	7	transmembrane protein 171
CCNO	8	6	6	6	9	7	cyclin L2
FTCD	7	4	8	5	15	7	folliculin-like 5
LOC104911041	0	2	6	16	10	7	otogelin-like
LOC104911209	6	4	4	6	4	7	uncharacterized LOC104911209
LOC104915500	4	5	5	4	7	7	protocadherin beta-15-like
PCDH9	10	8	5	5	5	7	protocadherin 9
LOC100551279	10	8	7	10	13	7	uncharacterized LOC100551279
DACH1	10	9	10	9	11	7	DAB2 interacting protein
LOC104914947	13	9	12	10	12	7	uncharacterized LOC104914947
CYTIP	8	11	4	8	9	7	cytohesin 4
NEU4	4	6	2	4	1	7	sialidase 4
LOC104916808							
	1	2	4	2	2	7	maestro heat-like repeat-containing protein family member 2B
LOC104915355	17	12	12	9	10	7	aminopeptidase Q-like
EV12B	9	3	7	8	5	7	ecotropic viral integration site 2A
LOC104916646	3	6	6	13	5	7	histone H2B 1/2/3/4/6
LOC104916191	6	5	6	5	5	7	uncharacterized LOC104916191
HGF	7	7	12	13	5	7	homogentisate 1,2-dioxygenase
LOC100549671							serine/threonine-protein phosphatase 2A 55 kDa regulatory subunit B
	7	4	9	6	9	7	gamma isoform
LOC104913041	8	9	8	12	12	7	uncharacterized LOC104913041
DRD3	8	8	4	8	13	7	dopamine receptor D2
LOC104911329	5	10	3	14	5	7	uncharacterized LOC104911329
TMC5	8	6	9	5	5	7	transmembrane channel-like 5
LOC104914587							
	9	8	11	12	12	7	potassium voltage-gated channel subfamily H member 2 pseudogene
LOC104911123	16	14	17	17	10	7	MAX gene-associated protein-like
LOC104911462	18	15	12	17	8	7	cytoplasmic dynein 1 intermediate chain 1-like
LOC100550042	6	4	3	2	5	7	integral membrane protein GPR155-like
LOC104913668	4	6	7	9	4	7	uncharacterized LOC104913668
LOC104914965	15	10	23	8	12	7	uncharacterized LOC104914965
LOC104912354	9	3	12	7	7	7	uncharacterized LOC104912354
LOC104914285	11	14	11	15	12	7	CUB and sushi domain-containing protein 2-like
LRRN3	10	10	9	9	9	7	leucine rich repeat neuronal 3
LOC104917590	3	5	3	4	3	7	uncharacterized LOC104917590
LOC104909636	13	15	9	9	15	7	uncharacterized LOC104909636
LOC104911937	11	11	12	10	7	7	uncharacterized LOC104911937
LOC104909499	19	5	17	13	17	7	uncharacterized LOC104909499
ZNF831	7	7	14	9	6	7	zinc finger protein 831
LOC104910534	21	11	15	16	19	7	uncharacterized LOC104910534
LOC104909215	15	11	10	14	11	7	coagulation factor VII-like
STX19	10	10	5	5	5	7	syntaxin 19
PRRT1	7	8	8	5	5	7	proline-rich transmembrane protein 1
LOC104917557	11	11	12	15	6	7	neurobeachin-like
LOC100543986	8	6	9	10	11	7	PHD finger protein 14
MX1	5	6	4	12	4	7	MX dynamin-like GTPase 1
CPNE7	7	7	2	5	3	7	copine IV
CXADR	4	6	7	5	4	7	chemokine (C-X3-C motif) receptor 1
LOC104910250	4	8	7	3	8	7	uncharacterized LOC104910250
LOC104915991	10	14	12	12	10	7	uncharacterized LOC104915991
LOC104910431	10	5	5	4	4	7	regulating synaptic membrane exocytosis protein 2-like
CD79B	3	7	7	8	5	7	CD79a molecule, immunoglobulin-associated alpha
LOC100544642	5	5	12	6	10	7	protein MRP-126
LOC104911285	3	3	3	3	1	7	uncharacterized LOC104911285
LOC104916698	7	2	6	5	23	7	uncharacterized LOC104916698
LOC104911053	3	8	6	10	5	7	uncharacterized LOC104911053
LOC104911794	9	7	12	6	9	7	uncharacterized LOC104911794
LOC104911360	8	7	7	7	6	7	uncharacterized LOC104911360
RNF43	6	7	9	4	4	7	ring finger protein 43
KLHDC7A	9	9	5	7	6	7	kelch domain containing 4

LOC104912297	5	4	5	4	6	7	guanine nucleotide exchange factor VAV3-like
PRR16	8	10	8	8	11	7	proline rich 16
LOC104914788	11	9	12	8	6	7	protein unc-13 homolog B
LOC104915939	6	3	4	7	8	7	mas-related G-protein coupled receptor member B4-like
LOC104914359	16	16	19	19	11	7	uncharacterized LOC104914359
LOC104916908	9	8	9	6	6	7	mucin-2-like
LOC104910587	5	6	10	7	11	7	electrogenic sodium bicarbonate cotransporter 1-like
RND2	10	10	4	9	11	7	Rho family GTPase 2
TESC	6	5	4	2	3	7	tescalcin
ASIC2	6	7	1	9	8	7	acid-sensing (proton-gated) ion channel 2
LOC104915597	6	6	5	3	8	7	sperm-associated antigen 4 protein-like
LOC104910671	13	9	5	6	11	7	uncharacterized LOC104910671
LOC104915021	5	5	5	5	9	7	uncharacterized LOC104915021
C26H11orf63	8	8	5	5	5	7	chromosome 26 open reading frame, human C11orf57
LOC104911307	8	5	10	7	7	7	GTPase IMAP family member 7-like
EFNA5	4	10	9	4	5	7	EF-hand domain family, member D2
LOC104917196	9	9	7	8	15	7	osteoclast-associated immunoglobulin-like receptor
LOC104912190	14	5	8	7	11	7	uncharacterized LOC104912190
LOC104911156	3	5	3	4	4	7	uncharacterized LOC104911156
LOC100541429	5	5	5	5	4	7	centrosomal protein of 112 kDa
SNAP25	9	8	12	6	31	7	synaptosomal-associated protein, 25kDa
MYRIP	4	8	9	7	4	7	myosin VIIA and Rab interacting protein
LOC100540586	7	5	6	4	8	7	uncharacterized LOC100540586
MUC2	9	10	9	9	4	7	mucin 2, oligomeric mucus/gel-forming
TRIM50	1	2	1	2	1	7	tripartite motif containing 50
R3HDM1	9	9	12	8	9	7	R3H domain containing-like
LOC104911361	6	8	7	4	3	7	uncharacterized LOC104911361
LOC104915695	2	6	2	6	2	7	uncharacterized LOC104915695
ELF3	20	18	16	10	22	7	E74-like factor 2 (ets domain transcription factor)
AMN	6	5	7	3	5	7	amnion associated transmembrane protein
MLNR	19	12	23	9	15	7	motilin receptor
LOC104909972	6	6	10	8	6	7	uncharacterized LOC104909972
FZD10	7	9	4	10	6	7	frizzled class receptor 1
KCNH1	5	6	11	6	5	7	potassium voltage-gated channel, subfamily G, member 4
LOC104913194	3	8	8	3	9	7	uncharacterized LOC104913194
LOC104911147	3	4	3	4	1	7	uncharacterized LOC104911147
LOC104914732	2	2	2	3	3	7	uncharacterized LOC104914732
LOC104912435	10	10	4	12	4	7	uncharacterized LOC104912435
LRRC43	20	12	12	12	24	7	leucine rich repeat containing 43
LOC104914067	2	3	4	3	3	7	probable phospholipid-transporting ATPase IIA
KIAA1456	7	7	9	9	10	7	KIAA1429 ortholog
TSNARE1	3	6	7	6	8	7	t-SNARE domain containing 1
LOC100541567	10	14	10	9	16	7	potassium channel subfamily T member 2
LOC104911235	8	5	8	5	6	7	uncharacterized LOC104911235
HTR2C							
	10	14	10	10	16	7	5-hydroxytryptamine (serotonin) receptor 2B, G protein-coupled
LOC104915629	4	13	4	9	5	7	protein-glutamine gamma-glutamyltransferase 2-like
PLD5	5	8	4	5	2	7	phospholipase D family, member 5
LOC104916786	26	10	25	9	19	7	fibrinogen-like protein 1
LOC104912967	8	11	12	9	12	7	uncharacterized LOC104912967
LOC104912922	9	4	6	6	7	7	uncharacterized LOC104912922
LOC100541941	6	6	6	6	4	7	protein kinase C delta type-like
LOC104909758							
	11	5	12	5	9	7	brefeldin A-inhibited guanine nucleotide-exchange protein 3-like
LOC104912365	6	5	16	7	5	7	dihydropyrimidine dehydrogenase [NADP(+)]-like
LOC104916550	9	5	5	9	8	7	osteoclast-associated immunoglobulin-like receptor
GPR132	8	3	4	6	3	7	G protein-coupled receptor 128
EPHA4	14	9	8	7	11	7	EPH receptor A2
PAK6	4	6	4	5	7	7	p21 protein (Cdc42/Rac)-activated kinase 6
LOC104917008	26	6	23	8	31	7	sialoadhesin-like
LOC104911562	12	13	7	14	20	7	uncharacterized LOC104911562
LOC100542889	7	7	5	17	1	7	cytochrome P450 1B1
FAM19A1	10	11	14	10	15	7	family with sequence similarity 199, X-linked
LOC100543549	3	5	6	7	5	7	olfactory receptor 14J1-like
NPY	11	6	10	7	15	7	neuropeptide Y
SLC26A9	10	12	9	11	8	7	solute carrier family 26 (anion exchanger), member 9
LOC100541658	3	4	3	4	5	7	microtubule-associated tumor suppressor candidate 2
LOC104910530	5	8	2	6	8	7	uncharacterized LOC104910530
ARC	5	7	7	4	11	7	activity-regulated cytoskeleton-associated protein
LOC104916812	4	3	1	3	2	7	uncharacterized LOC104916812
RSPH10B	13	6	3	8	4	7	radial spoke head 10 homolog B (Chlamydomonas)
HHLA2	13	10	9	18	8	7	HERV-H LTR-associating 1
SLCO1A2	6	11	5	6	5	7	solute carrier organic anion transporter family, member 1A2
LOC104912687	6	6	9	6	10	7	uncharacterized LOC104912687
LOC100549516	6	2	6	4	5	7	wolframin-like
ATOH7	10	6	16	7	18	7	atonal homolog 7 (Drosophila)
RIPPLY2	7	5	4	5	4	7	rippy transcriptional repressor 2
EPHA1	9	8	4	7	8	7	epithelial mitogen
GPR12	7	4	9	5	5	7	G protein-coupled receptor 119

LOC100546634	6	11	9	12	12	7	survival of motor neuron protein-like
MUC4	16	7	13	9	7	7	mucin 4, cell surface associated
LOC104917021	13	9	11	7	10	7	sialidase-3-like
LOC104911572	9	7	9	13	7	7	uncharacterized LOC104911572
LOC104910002	6	8	6	7	6	7	uncharacterized LOC104910002
AGRP	2	6	4	6	5	7	agouti related neuropeptide
LOC104913847	4	2	5	3	6	7	apoptosis-inducing factor 3-like
ENPEP	13	10	10	8	9	7	ecto-NOX disulfide-thiol exchanger 2
LOC104912154	8	8	10	5	6	7	uncharacterized LOC104912154
CA14	6	4	6	5	4	7	carbonic anhydrase XII
LOC100547693	8	12	12	14	11	7	zonadhesin-like
LOC104912124	8	2	7	5	5	7	uncharacterized LOC104912124
LOC104913905	7	5	5	4	6	7	uncharacterized LOC104913905
KCNA2							
	12	17	14	10	10	7	potassium voltage-gated channel, shaker-related subfamily, member 10
LOC100550328							
	20	10	22	12	14	7	brefeldin A-inhibited guanine nucleotide-exchange protein 3-like
LOC104914816	12	9	16	8	17	7	uncharacterized LOC104914816
HORMAD2	18	6	12	6	10	7	HORMA domain containing 1
LOC100540973	4	5	4	5	6	7	E3 ubiquitin-protein ligase RNF13-like
ITK	5	6	10	8	5	7	inter-alpha-trypsin inhibitor heavy chain family, member 5
TMEM114	9	5	7	7	13	7	transmembrane protein 114
C30H19orf45	5	4	12	4	7	7	chromosome 30 open reading frame, human C19orf44
LRRC4C	3	12	11	10	9	7	leucine rich repeat containing 4C
C2HXorf21	7	7	7	7	10	7	chromosome 2 open reading frame, human C6orf57
LOC104912323	7	12	10	9	9	7	uncharacterized LOC104912323
LOC104909792	10	7	8	8	4	7	receptor-type tyrosine-protein phosphatase kappa-like
LOC104914591	6	4	7	4	0	7	uncharacterized LOC104914591
LOC104917446	11	4	7	6	8	7	uncharacterized LOC104917446
LOC104911240	8	5	3	5	8	7	uncharacterized LOC104911240
LOC104910295	10	5	7	4	10	7	histamine H3 receptor-like
ANKRD55	8	5	6	6	5	7	ankyrin repeat domain 55
LOC104913681	11	11	16	11	21	7	OX-2 membrane glycoprotein-like
LOC104915410	3	7	5	2	3	7	epiplakin-like
LOC100303683	9	14	11	8	14	7	somatotropin
LOC104915109	10	11	7	9	13	7	uncharacterized LOC104915109
LOC100547584	4	5	9	4	8	7	UDP-glucuronosyltransferase 1-1-like
ARL13A	7	8	7	7	11	7	ADP-ribosylation factor-like 13A
LOC104909573	12	9	14	8	7	7	uncharacterized LOC104909573
ESRP2	7	7	4	6	4	7	epithelial splicing regulatory protein 1
LOC104909926	8	7	5	12	8	7	uncharacterized LOC104909926
LOC104911052	4	5	4	10	5	7	uncharacterized LOC104911052
LOC104911112	9	7	4	6	7	7	uncharacterized LOC104911112
LOC104912635	11	8	5	7	10	7	ephriin type-A receptor 4-like
TMEM125	5	7	5	5	6	7	transmembrane protein 125
LOC100538538	7	6	5	5	6	7	cathelicidin-B1-like
LOC104916655	4	6	2	2	4	7	uncharacterized LOC104916655
LOC104909900	16	9	11	12	11	7	uncharacterized LOC104909900
TUBB3	11	14	8	8	3	7	tubulin, beta 3 class III
LOC104916242	7	3	5	5	2	7	platelet glycoprotein VI-like
LOC100548071	10	12	10	13	11	7	histone-lysine N-methyltransferase SUV39H1-like
C10H1orf146	12	8	9	8	20	7	chromosome 10 open reading frame, human C1orf123
LOC104914728							
	17	15	21	14	15	7	maestro heat-like repeat-containing protein family member 2B
LOC104912321	7	7	7	3	2	7	uncharacterized LOC104912321
C8B	16	9	11	7	14	7	complement component 8, alpha polypeptide
LOC104912315	1	8	2	2	0	7	uncharacterized LOC104912315
LOC100545617	2	4	5	4	2	7	zinc finger protein 70-like
LOC104912129	8	7	6	4	7	7	uncharacterized LOC104912129
LOC104912872	7	7	8	4	7	7	uncharacterized LOC104912872
LOC100542243	9	7	7	10	9	7	CREB-binding protein
LOC104911311	11	10	16	6	8	7	cytokine receptor common subunit beta-like
LOC104914782	8	8	6	7	7	7	protein unc-13 homolog B-like
LOC100546965	7	6	7	8	8	7	cis-aconitate decarboxylase-like
NR0B1	4	6	6	6	5	7	nuclear receptor subfamily 0, group B, member 1
DNAJC6	15	11	12	9	8	7	DnaJ (Hsp40) homolog, subfamily C, member 5 beta
LOC104912403	7	4	7	4	6	7	uncharacterized LOC104912403
CALR3	4	4	5	5	5	7	calreticulin
LOC104911766	9	9	11	7	14	7	uncharacterized LOC104911766
RASAL3	11	7	8	6	5	7	RAS protein activator like 3
LOC104909533	19	10	13	8	4	7	estradiol 17-beta-dehydrogenase 2-like
STAR	6	9	6	12	17	7	steroidogenic acute regulatory protein
LOC104909842	6	13	8	4	8	7	uncharacterized LOC104909842
FAM19A2							family with sequence similarity 19 (chemokine (C-C motif)-like), member A1
	9	4	9	4	5	7	
LOC100548269	7	4	10	7	6	7	arg8-vasotocin receptor-like
LOC104916981	5	3	2	2	4	7	all-trans-retinol 13,14-reductase-like
LOC100549896	9	4	4	2	10	7	protein tweety homolog 3-like
LOC104915404	9	4	3	5	8	7	epiplakin-like

C7H21orf58	2	5	4	4	1	7	complement component 7
WIF1	2	10	6	1	1	7	WNT inhibitory factor 1
LOC104915815	5	5	5	4	2	6	protocadherin alpha-13-like
LOC104911468	10	7	13	12	13	6	cyclin-dependent kinase 14-like
LOC104916073	8	1	7	7	1	6	homeobox protein Hox-C4-like
LOC100541557	13	5	12	12	13	6	voltage-dependent calcium channel subunit alpha-2/delta-1-like
LOC104911942	1	4	4	10	3	6	uncharacterized LOC104911942
HOXC8	7	6	6	6	5	6	homeobox C6
LOC104915242	4	6	2	5	3	6	uncharacterized LOC104915242
GPC5	6	2	0	2	4	6	glypican 4
LOC100550557	11	7	5	6	11	6	caskin-1-like
MGAT4D	6	3	6	5	9	6	MGAT4 family, member D
LOC104910807	4	14	0	7	4	6	uncharacterized LOC104910807
LOC104911089	6	3	4	5	2	6	cytosolic phospholipase A2 beta-like
LOC104910770	9	7	7	6	3	6	probable phospholipid-transporting ATPase VD
LOC104916251	2	5	3	5	4	6	folate receptor beta-like
LOC104915579	7	3	9	5	4	6	maestro heat-like repeat-containing protein family member 2B
ANGPT1	8	9	13	11	9	6	angiotensinogen 1
LOC100548146	4	8	4	4	4	6	phosphatidylinositol 4-phosphate 3-kinase C2 domain-containing subunit alpha
CA12	12	14	14	13	8	6	carbonic anhydrase X
LOC104915195	10	4	7	7	5	6	uncharacterized LOC104915195
PFKFB3	3	3	2	5	4	6	6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 3
LOC104915860	7	4	4	4	4	6	uncharacterized LOC104915860
LOC104912721	5	4	7	5	5	6	uncharacterized LOC104912721
PRLHR	8	1	10	3	17	6	prolactin releasing hormone receptor
NMNAT2	2	5	5	4	4	6	nicotinamide nucleotide adenyltransferase 2
SGSM1	3	6	4	4	4	6	small G protein signaling modulator 1
LOC104913789	6	3	7	5	5	6	cell surface glycoprotein CD200 receptor 1-B-like
LOC104912455	6	4	7	2	4	6	uncharacterized LOC104912455
LOC100549962	10	11	11	13	24	6	perilipin-3-like
LOC104912655	3	1	1	0	6	6	uncharacterized LOC104912655
LOC104917566	4	5	6	5	6	6	short transient receptor potential channel 4-like
LOC100540528	8	4	13	6	5	6	T-cell-interacting, activating receptor on myeloid cells protein 1-like
LOC104912974	10	5	4	6	6	6	protein NLR5-like
NOG	9	17	7	6	2	6	noggin
LOC104911432	11	8	8	8	7	6	uncharacterized LOC104911432
SERPINB10	8	8	10	6	11	6	serpin peptidase inhibitor, clade B (ovalbumin), member 10
LOC104915544	11	3	9	6	10	6	uncharacterized LOC104915544
LOC104912601	9	4	9	2	5	6	uncharacterized LOC104912601
LOC104916738	4	5	5	4	2	6	E3 ubiquitin-protein ligase TRIM36-like
LOC104914141	9	10	10	9	15	6	uncharacterized LOC104914141
LOC100542834	11	5	10	14	14	6	cytochrome c oxidase subunit 7A-related protein, mitochondrial
LOC104914325	5	4	4	7	8	6	uncharacterized LOC104914325
NPS	1	2	1	1	3	6	neuropeptide S
LOC104913514	3	6	7	8	2	6	uncharacterized LOC104913514
LOC100538433	3	5	3	4	1	6	tetratricopeptide repeat domain 6
ATP6V0A4	3	5	5	4	6	6	ATPase, H+ transporting, lysosomal V0 subunit a4
TDRD6	6	8	11	8	5	6	tudor domain containing 6
LOC104910965	7	4	7	4	4	6	uncharacterized LOC104910965
RGS8	8	3	7	1	1	6	regulator of G-protein signaling 8
MUC	6	9	7	8	16	6	mucin protein
PLEKHB1	9	11	17	10	8	6	pleckstrin homology domain containing, family B (evectins) member 1
C15H5orf58	9	7	7	5	6	6	chromosome 15 open reading frame, human C5orf45
LOC100548996	4	6	3	3	6	6	aldose reductase-like
PRPH	12	8	9	8	7	6	peripherin
LOC100549708	4	5	6	4	6	6	GRAM domain-containing protein 4
LOC104909752	5	7	11	6	4	6	uncharacterized LOC104909752
LOC104912825	3	5	3	5	6	6	uncharacterized LOC104912825
LOC104912037	8	6	7	6	5	6	uncharacterized LOC104912037
LOC104911381	3	7	3	5	2	6	uncharacterized LOC104911381
LOC104913038	5	8	9	4	5	6	uncharacterized LOC104913038
LOC104913123	7	4	7	6	9	6	maestro heat-like repeat-containing protein family member 7
LOC104909754	7	2	4	4	8	6	uncharacterized LOC104909754
TNFRSF18	8	8	4	5	11	6	tumor necrosis factor receptor superfamily, member 18
ERICH6B	5	4	4	3	9	6	glutamate-rich 6
FSTL5	9	11	7	11	5	6	folliculin-like 3 (secreted glycoprotein)
LOC100544944	13	9	6	8	13	6	natural killer cells antigen CD94-like
LOC104917366	8	6	7	6	5	6	feline leukemia virus subgroup C receptor-related protein 1-like
IKZF3	5	5	10	6	5	6	IKAROS family zinc finger 2 (Helios)
C19H9orf172	10	9	10	6	5	6	chromosome 19 open reading frame, human C9orf171
LOC104917467	7	6	11	8	4	6	uncharacterized LOC104917467

LOC104913394	6	4	3	5	5	6	uncharacterized LOC104913394
KCTD19	8	8	4	9	7	6	potassium channel tetramerization domain containing 18
TNFSF13B	4	4	6	9	6	6	tumor necrosis factor (ligand) superfamily, member 13b
LOC104914531	4	7	2	5	4	6	uncharacterized LOC104914531
LOC104913433	5	5	5	5	4	6	uncharacterized LOC104913433
KRT23	11	2	5	2	2	6	keratin 222
LOC104909581	5	12	7	6	9	6	uncharacterized LOC104909581
LOC104917582	10	8	9	8	7	6	neurobeachin-like
S100B	6	9	7	8	5	6	S100 calcium binding protein B
LOC104909911	5	7	3	7	3	6	maestro heat-like repeat-containing protein family member 2B
LOC104912990	10	6	8	7	14	6	estradiol 17-beta-dehydrogenase 2-like
LOC104913651	7	8	17	5	7	6	uncharacterized LOC104913651
LOC104912106	8	3	11	5	8	6	voltage-dependent calcium channel subunit alpha-2/delta-4-like
LOC104914894	7	5	3	5	6	6	interleukin-6 receptor subunit beta-like
LOC104914016	4	6	11	5	3	6	enteropeptidase-like
LOC104914483	5	13	3	9	9	6	complement decay-accelerating factor-like
BANK1	10	7	10	7	5	6	B-cell scaffold protein with ankyrin repeats 1
MSANTD1	4	4	2	6	3	6	Myb/SANT-like DNA-binding domain containing 1
TNNI3K	9	9	8	9	5	6	TNNI3 interacting kinase
LOC104910211	24	17	13	10	8	6	gamma-aminobutyric acid type B receptor subunit 2-like
LRRC26	8	6	6	7	10	6	leucine rich repeat containing 26
LOC104915183	5	6	12	5	1	6	uncharacterized LOC104915183
GPR171	5	6	5	7	8	6	G protein-coupled receptor 17
LOC100539643	2	6	1	4	6	6	glycosyltransferase-like protein LARGE1
LOC104909567	4	8	9	11	4	6	uncharacterized LOC104909567
CCSER1	7	5	5	5	3	6	centriole, cilia and spindle-associated protein
LOC104916277	16	14	13	12	18	6	ras/Rap GTPase-activating protein SynGAP-like
LOC104912804	8	5	6	8	9	6	proline-serine-threonine phosphatase-interacting protein 1-like
SLC35F1	10	10	3	7	4	6	solute carrier family 35, member F1
LOC100549054	5	6	4	9	7	6	glutamate receptor ionotropic, kainate 2-like
LOC104913865	11	5	6	4	5	6	uncharacterized LOC104913865
LOC104917442	2	5	7	2	2	6	uncharacterized LOC104917442
LOC104917384	3	3	4	1	3	6	PHD finger protein 7-like
LOC104914772	12	7	12	5	9	6	dynein intermediate chain 1, axonemal
ICOS	5	5	4	9	9	6	intestinal cell (MAK-like) kinase
GAP43	9	9	12	7	6	6	glucosidase, alpha; neutral C
LOC104916312	6	11	5	6	6	6	forkhead box protein C2-like
LOC104913871	3	2	5	2	5	6	uncharacterized LOC104913871
LOC100543356	9	8	9	6	7	6	lysine-specific demethylase 5A
LOC104911067	3	3	4	2	4	6	uncharacterized LOC104911067
NMUR1	6	3	1	3	3	6	neuromedin U receptor 1
AMER2	7	7	9	7	11	6	APC membrane recruitment protein 2
LOC104910423	8	4	3	3	4	6	syntabulin-like
SLC35F3	10	7	5	6	8	6	solute carrier family 35, member F3
B3GNT7	11	13	15	10	6	6	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 7
LOC100549361	3	5	2	4	1	6	ellis-van Creveld syndrome protein
LOC104909817	15	46	10	28	17	6	uncharacterized LOC104909817
LOC100549545	10	6	13	11	6	6	alkaline phosphatase, tissue-nonspecific isozyme-like
LOC100548696	7	6	7	7	6	6	suppression of tumorigenicity 18 protein-like
NPFFR1	7	5	7	5	10	6	neuropeptide FF receptor 1
LOC104916997	11	7	4	7	7	6	uncharacterized LOC104916997
FGF5	8	10	6	11	1	6	fibroblast growth factor 4
SLC13A3	9	4	7	5	10	6	solute carrier family 13 (sodium-dependent dicarboxylate transporter), member 3
GIPC3	5	9	9	6	4	6	GIPC PDZ domain containing family, member 2
RHCG	34	17	10	24	33	6	Rh family, C glycoprotein
LOC104912305	8	5	5	3	6	6	uncharacterized LOC104912305
LOC104913673	7	5	3	4	3	6	uncharacterized LOC104913673
LOC104915739	8	7	7	4	5	6	uncharacterized LOC104915739
SAMD3	7	6	5	4	3	6	sterile alpha motif domain containing 3
LOC104909965	6	7	8	13	9	6	plectin-like
CORO2A	6	12	5	6	2	6	coronin, actin binding protein, 1C
LOC104909700	5	4	10	4	6	6	uncharacterized LOC104909700
LOC104917037	8	1	7	1	6	6	uncharacterized LOC104917037
CALB2	5	3	6	3	5	6	calbindin 1, 28kDa
CEL	6	4	1	3	2	6	cat eye syndrome chromosome region, candidate 6
LOC100549440	1	4	1	4	1	6	aromatase
LOC104917133	3	1	3	1	2	6	uncharacterized LOC104917133
AK5	2	4	4	3	3	6	adenylate kinase 5
LOC104915520	7	8	3	9	3	6	uncharacterized LOC104915520
FGF14	3	6	3	2	1	6	fibroblast growth factor 13
LOC100548078	3	6	4	7	3	6	disheveled-associated activator of morphogenesis 2
MAR2	4	6	6	8	9	6	membrane-associated ring finger (C3HC4) 2, E3 ubiquitin protein ligase
DCDC2	4	9	6	12	6	6	doublecortin domain containing 1

LOC104914398	5	2	3	3	5	6	nucleoporin-like protein 2
LOC104915371	4	3	3	5	4	6	uncharacterized LOC104915371
LOC104912515	6	7	7	6	8	6	vitellogenin-1-like
LOC104909389	2	3	5	3	4	6	uncharacterized LOC104909389
LOC104912631	4	3	5	3	2	6	dedicator of cytokinesis protein 9-like
GUCY2C	3	3	1	3	7	6	guanylate cyclase 1, soluble, beta 3
TMEM178B	9	10	6	10	11	6	transmembrane protein 178B
GCGR	17	20	9	15	5	6	glucagon
SCG5	11	8	8	8	5	6	secretogranin V (7B2 protein)
LOC100541564	8	5	6	5	6	6	putative P2Y purinoceptor 10
LOC104910005	1	1	4	3	2	6	uncharacterized LOC104910005
LOC104911183	27	3	19	7	15	6	uncharacterized LOC104911183
IL20RA	6	5	8	6	7	6	interleukin 1 receptor antagonist
PLEKHA4							pleckstrin homology domain containing, family A (phosphoinositide binding specific) member 4
	6	6	5	3	4	6	
LOC104910883	3	2	1	2	2	6	uncharacterized LOC104910883
LOC104912739	2	3	4	4	6	6	uncharacterized LOC104912739
LOC104909707	5	7	3	11	4	6	uncharacterized LOC104909707
LOC104912915	7	7	9	6	8	6	fatty acyl-CoA hydrolase precursor, medium chain-like
LOC104913059	1	6	7	4	4	6	uncharacterized LOC104913059
MAP3K19	5	5	4	5	3	6	mitogen-activated protein kinase kinase kinase 19
LOC104912529	4	5	8	4	2	6	uncharacterized LOC104912529
LOC100545191	10	16	5	10	7	6	parvalbumin, thymic CPV3
BAI2	5	6	5	7	6	6	brain-specific angiogenesis inhibitor 2
C11H2orf82	7	12	10	6	12	6	chromosome 11 open reading frame, human C2orf54
IQSEC3	5	3	6	4	6	6	IQ motif and Sec7 domain 1
CD6	6	3	4	4	2	6	CD59 molecule, complement regulatory protein
SLC30A2	4	8	4	9	10	6	solute carrier family 30 (zinc transporter), member 2
LOC104912060	13	4	10	9	11	6	protein FAM196A
LECT2	8	9	3	9	5	6	leukocyte cell derived chemotaxin 1
LOC104911747	5	5	3	3	2	6	uncharacterized LOC104911747
LOC104910501	3	5	2	3	2	6	uncharacterized LOC104910501
LOC104913497	11	3	9	6	7	6	cytochrome P450 3A40-like
LOC104914144	6	5	6	5	4	6	uncharacterized LOC104914144
HTR1E							
	56	24	53	30	18	6	5-hydroxytryptamine (serotonin) receptor 1D, G protein-coupled
LOC104913096	4	3	3	5	7	6	PHD finger protein 7-like
LOC100545420	4	2	2	3	6	6	corin, serine peptidase
LOC104914232	14	8	6	9	6	6	uncharacterized LOC104914232
LOC100539388	3	4	4	4	4	6	antimicrobial peptide NK-lysin-like
CACNG2	4	5	4	4	4	6	calcium channel, voltage-dependent, gamma subunit 1
LOC104916657	14	9	25	14	7	6	myosin heavy chain, skeletal muscle, adult-like
GABRA4	1	3	6	3	5	6	gamma-aminobutyric acid (GABA) A receptor, alpha 3
LOC104909654	11	6	11	6	14	6	uncharacterized LOC104909654
LOC100544298	5	2	4	2	4	6	ras-related protein Rab-3B-like
RSPO2	2	4	4	3	3	6	R-spondin 2
LOC104913457	17	13	15	9	9	6	uncharacterized LOC104913457
SLA2	10	8	8	6	6	6	Src-like-adaptor 2
BSPRY							
	12	5	6	8	1	6	barttin CLCNK-type chloride channel accessory beta subunit
CHRD12	7	9	5	6	6	6	chordin-like 1
LOC104910996	4	6	6	6	6	6	uncharacterized LOC104910996
LOC104914095	3	6	3	5	6	6	probable phospholipid-transporting ATPase IIA
LOC104915072	7	5	5	5	4	6	guanine deaminase-like
LOC104909465	1	2	1	1	1	6	uncharacterized LOC104909465
TMEM247	6	8	6	6	8	6	transmembrane protein 247
LOC104912177	8	10	4	7	10	5	uncharacterized LOC104912177
UTS2	2	3	1	2	4	5	urotensin 2
LOC104912203	6	5	9	2	4	5	uncharacterized LOC104912203
LOC104909508	14	9	15	12	11	5	uncharacterized LOC104909508
LCK	11	7	11	6	10	5	lecithin-cholesterol acyltransferase
LOC104914501	5	12	8	5	8	5	neurofascin-like
LOC104913036	6	5	3	4	6	5	uncharacterized LOC104913036
RIBC2	11	8	4	7	8	5	RIB43A domain with coiled-coils 2
LOC104912788	4	5	2	6	7	5	uncharacterized LOC104912788
ARHGAP27	10	9	13	10	14	5	Rho GTPase activating protein 27
LOC104914775	4	4	1	1	3	5	uncharacterized LOC104914775
LOC104916420	9	1	4	3	8	5	adenylate cyclase type 10-like
C2H6orf163	19	10	12	11	10	5	chromosome 2 open reading frame, human C6orf120
LOC104909812	4	4	4	3	5	5	uncharacterized LOC104909812
GFI1	4	6	10	4	9	5	growth factor, augmentor of liver regeneration
LOC104917242	8	2	9	2	7	5	zinc finger protein 621-like
LOC104909301	13	5	12	8	5	5	keratin, type I cytoskeletal 13-like
LOC104909777	9	5	7	8	5	5	uncharacterized LOC104909777
LOC104913973	4	2	0	2	2	5	outer dense fiber protein 3-like
LOC100547459	7	8	12	9	10	5	methionine--tRNA ligase, cytoplasmic-like
BMP3	4	7	9	4	5	5	bone morphogenetic protein 3
LOC100547425	9	7	8	9	10	5	dipeptidyl peptidase 4-like
LOC104909857	8	4	4	7	4	5	uncharacterized LOC104909857

LOC104913782	4	6	2	4	2	5	glutamine rich 2
LOC104916293	2	2	4	6	5	5	adenylate cyclase type 10-like
LOC104914384	9	5	8	4	8	5	laminin subunit gamma-2-like
KCTD17	2	5	9	4	3	5	potassium channel tetramerization domain containing 16
LOC104912249	2	3	1	5	8	5	uncharacterized LOC104912249
LOC104912285	2	4	7	3	1	5	uncharacterized LOC104912285
TNN	5	6	10	5	8	5	tenascin N
LOC104912244	5	5	5	4	6	5	uncharacterized LOC104912244
LOC104916095	7	5	7	3	6	5	retinol dehydrogenase 12-like
FZD5	6	7	4	9	3	5	frizzled class receptor 4
LOC104916498	11	6	7	6	21	5	glucosylceramidase-like
LOC104911639	4	3	4	3	3	5	uncharacterized LOC104911639
CNTN2	10	14	10	10	7	5	contactin 1
DIO1							
	4	9	7	8	6	5	DIM1 dimethyladenosine transferase 1 homolog (S. cerevisiae)
LOC104912905	6	4	9	5	6	5	creatine kinase U-type, mitochondrial-like
SLC13A5							solute carrier family 13 (sodium-dependent citrate transporter), member 5
	2	4	3	3	6	5	5
DBH	3	6	3	3	7	5	DBF4 zinc finger B
ART4	16	5	6	12	20	5	ADP-ribosyltransferase 4 (Dombrock blood group)
LOC104914488	7	5	9	6	10	5	uncharacterized LOC104914488
LOC100542877	4	6	6	3	6	5	keratin, type I cytoskeletal 9-like
LOC104910464	10	11	8	11	5	5	uncharacterized LOC104910464
TNR	8	4	3	4	4	5	tenascin R
LOC104909505	5	11	7	6	6	5	CD63 antigen-like
LOC100549076	6	5	3	4	1	5	uncharacterized LOC100549073
FAM46D	3	6	10	3	6	5	family with sequence similarity 46, member C
LOC100539699	1	2	2	0	1	5	integrin beta-like protein 1
LOC104914134	9	9	8	6	6	5	uncharacterized LOC104914134
FXVD2	2	14	2	6	6	5	fragile X mental retardation, autosomal homolog 1
LOC104911435	3	3	3	2	1	5	uncharacterized LOC104911435
LOC104910537	8	7	8	11	5	5	uncharacterized LOC104910537
LOC104915270	1	5	6	5	3	5	uncharacterized LOC104915270
RBP2	3	5	3	6	4	5	retinol binding protein 2, cellular
LOC104912565	3	5	2	2	2	5	uncharacterized LOC104912565
SERPINB5	9	8	7	9	25	5	serpin peptidase inhibitor, clade B (ovalbumin), member 5
LOC104911677	6	5	5	3	2	5	uncharacterized LOC104911677
MYO5C	13	9	11	12	8	5	myosin VC
LOC104910309	0	1	1	2	2	5	uncharacterized LOC104910309
LOC104913240	13	19	8	14	8	5	uncharacterized LOC104913240
LOC100546979	9	3	8	4	10	5	caspase recruitment domain-containing protein 8-like
LOC104912303	5	7	6	9	5	5	uncharacterized LOC104912303
LOC104917171	5	6	5	7	2	5	very long-chain acyl-CoA synthetase-like
TECTB	6	2	4	3	1	5	tectorin beta
LOC100551010	9	7	9	6	9	5	uricase-like
LOC100544999	7	9	8	6	9	5	perilipin-3-like
LOC100549614	4	4	6	3	4	5	zinc finger protein 668-like
LOC104915809	6	7	6	6	9	5	uncharacterized LOC104915809
LOC100540396	5	10	9	8	6	5	putative gonadotropin-releasing hormone II receptor
DGKI	8	6	4	6	2	5	diacylglycerol kinase, eta
LRRC19	7	6	4	4	6	5	leucine rich repeat containing 19
LOC104914008							
	8	8	8	4	9	5	ganglioside-induced differentiation-associated protein 1-like 1
FAM154B	6	3	3	3	3	5	family with sequence similarity 154, member A
LOC104911969	5	0	1	6	0	5	kinesin-like protein KIF20B
LOC104910531	4	3	5	4	4	5	uncharacterized LOC104910531
LOC100542400	9	6	4	7	13	5	adenylate cyclase type 9-like
LOC104914499	9	6	8	4	6	5	neurofascin-like
LOC104910599	5	6	4	2	4	5	uncharacterized LOC104910599
LOC104914091	13	8	8	3	7	5	bactericidal permeability-increasing protein-like
STC1	6	10	5	7	7	5	stanniocalcin 1
LOC104910457	6	6	7	6	6	5	uncharacterized LOC104910457
LOC104917463	13	5	6	2	7	5	uncharacterized LOC104917463
LOC104913472	4	5	4	4	6	5	glucagon receptor-like
LOC104913508	10	7	9	7	5	5	uncharacterized LOC104913508
LOC104911450	5	7	7	6	5	5	nebulette-like
LOC104912577	2	9	3	4	3	5	uncharacterized LOC104912577
LOC104911663	9	4	8	1	11	5	uncharacterized LOC104911663
LOC104916748	10	6	8	8	7	5	uncharacterized LOC104916748
LOC104915610	7	2	2	6	5	5	cytochrome P450 2C4-like
LOC104911274	10	4	5	7	4	5	cingulin-like
KCNK9	1	5	7	6	15	5	potassium channel, subfamily K, member 5
LOC104917471	4	3	2	3	2	5	E3 ubiquitin-protein ligase TRAP-like
LOC104910009	2	6	2	5	2	5	uncharacterized LOC104910009
LOC104910994	6	7	9	8	4	5	liprin-beta-2-like
LOC104911975	11	7	10	9	17	5	uncharacterized LOC104911975
LOC104911921	5	2	6	4	10	5	protein FAM13A-like
AKAP14	6	5	9	6	5	5	A kinase (PRKA) anchor protein 14
STK31	6	6	7	4	3	5	serine/threonine kinase 31

LOC104910564	6	7	6	11	6	5	uncharacterized LOC104910564
LOC104917549	4	3	5	4	2	5	uncharacterized LOC104917549
ZP4	7	6	8	10	16	5	zona pellucida glycoprotein 4
LOC104911621	3	4	7	2	10	5	uncharacterized LOC104911621
FRMD7	7	4	4	7	4	5	FERM domain containing 6
LOC104912908	6	3	9	4	5	5	uncharacterized LOC104912908
GABRA3	11	13	11	8	14	5	gamma-aminobutyric acid (GABA) A receptor, alpha 2
LOC104911071	4	3	3	1	1	5	uncharacterized LOC104911071
LOC104914260	9	10	12	8	21	5	uncharacterized LOC104914260
LAMC3	1	7	8	4	6	5	laminin, gamma 2
LOC104913818	13	7	8	5	11	5	uncharacterized LOC104913818
UNC79	7	7	6	8	7	5	unc-79 homolog (C. elegans)
FLT3	6	8	9	8	10	5	fibronectin leucine rich transmembrane protein 3
LOC104916100	3	4	3	4	5	5	uncharacterized LOC104916100
LOC100303701	4	3	5	7	8	5	serum paraoxonase/arylesterase 2
LOC104914691	6	3	8	4	5	5	uncharacterized protein KIAA1958-like
INS	6	2	12	2	9	5	inositol polyphosphate-5-phosphatase K
LOC104914494	3	3	4	3	7	5	uncharacterized LOC104914494
LOC104909557	4	3	4	4	6	5	hydroxyacid oxidase 1-like
LOC104916848	6	9	7	7	5	5	glutamate receptor ionotropic, kainate 5-like
LOC104917508	1	2	4	4	4	5	uncharacterized LOC104917508
LOC104917249	2	3	3	4	2	5	annexin A4-like
LOC104909572	3	5	3	5	5	5	uncharacterized LOC104909572
DMP1	11	7	8	7	9	5	dimethylglycine dehydrogenase
LOC100548260	7	10	9	7	7	5	myeloperoxidase-like
FAM83A	0	3	2	3	2	5	family with sequence similarity 81, member B
CD2	3	4	4	2	2	5	CD180 molecule
IL5RA	4	4	5	6	9	5	interleukin 4 receptor
C23H1orf158	6	4	6	6	5	5	chromosome 22 open reading frame, human C20orf24
LOC104916682	3	2	2	4	5	5	uncharacterized LOC104916682
ESYT3	7	3	1	5	4	5	extended synaptotagmin-like protein 2
CALN1	9	6	10	4	5	5	calmodulin-like 4
LOC104909986	2	4	6	2	4	5	uncharacterized LOC104909986
LOC104913566	2	9	8	5	7	5	uncharacterized LOC104913566
RSPD1	7	5	5	3	4	5	R-spondin 1
LOC100542048	3	2	7	3	3	5	calmodulin, striated muscle
SLITRK1	2	6	3	7	3	5	SLIT and NTRK-like family, member 1
UNC13C	7	9	10	13	13	5	unc-13 homolog C (C. elegans)
LOC104912748	11	4	5	4	3	5	uncharacterized LOC104912748
LOC104913161	12	9	13	9	9	5	uncharacterized LOC104913161
MAMDC4	5	8	7	7	7	5	MAM domain containing 4
LOC104909513	4	5	7	6	6	5	uncharacterized LOC104909513
LOC100546043	5	6	8	8	5	5	tetraspanin-18-like
LOC104915687	7	6	3	11	4	5	fibrous sheath CABYR-binding protein-like
TOX	4	3	2	2	4	5	thymocyte selection-associated high mobility group box
LOC104914482	12	7	3	6	4	5	complement component receptor 1-like protein
LOC104913002	7	11	7	3	4	5	cadherin-8-like
GPR174	10	3	5	5	3	5	G protein-coupled receptor 171
EFHB	3	3	4	2	2	5	EGF containing fibulin-like extracellular matrix protein 1
LOC104914497	2	8	6	8	12	5	uncharacterized LOC104914497
LOC100548793	5	3	8	5	7	5	collagen alpha-1(XII) chain-like
LOC104914799	2	4	5	4	1	5	B-cell differentiation antigen CD72-like
LOC100548067	7	7	8	7	10	5	membrane primary amine oxidase-like
LOC104912589	6	7	6	3	4	5	uncharacterized LOC104912589
LOC104911027	8	8	9	9	12	5	harmonin-like
LOC104914347	5	6	8	9	10	5	uncharacterized LOC104914347
GLYATL3	4	5	5	7	11	5	glutamate-ammonia ligase
ARHGEF5	4	5	7	3	5	5	Rho guanine nucleotide exchange factor (GEF) 5
LOC100540301	0	4	2	4	2	5	uncharacterized LOC100540290
NECAB1	3	6	8	4	8	5	N-terminal EF-hand calcium binding protein 1
LOC104912476	6	3	4	5	6	5	uncharacterized LOC104912476
RAB36	2	4	4	2	3	5	RAB36, member RAS oncogene family
FAM183A	7	4	10	5	5	5	family with sequence similarity 181, member A
LOC104911271	11	13	9	8	10	5	uncharacterized LOC104911271
LOC104915668	6	5	5	4	8	5	uncharacterized LOC104915668
GDF5	2	10	2	5	1	5	growth differentiation factor 2
NRGN	6	9	3	7	11	5	neurogranin (protein kinase C substrate, RC3)
LOC104914127	7	4	11	9	5	5	uncharacterized LOC104914127
RXFP3	3	5	1	4	0	5	relaxin/insulin-like family peptide receptor 3
RGS1	6	5	7	9	7	5	regulator of G-protein signaling 1
LOC104912582	8	13	3	7	4	5	uncharacterized LOC104912582
LOC104912182	3	3	4	4	4	5	uncharacterized LOC104912182
LOC104916650	2	0	3	1	1	5	histone H3
XG	4	4	5	5	2	5	Xg blood group
LOC104911628	13	6	12	5	17	5	uncharacterized LOC104911628
LOC104910692	9	9	7	10	11	5	teneurin-3-like
ELOVL4	2	4	2	4	9	5	ELOVL fatty acid elongase 3
LOC100550364	6	9	6	7	4	5	hydroxysteroid 11-beta dehydrogenase 1
LOC104912092	2	5	5	8	3	5	uncharacterized LOC104912092

RUNX3	4	4	4	4	4	5	runx-related transcription factor 3
LOC104909734	3	1	7	2	3	5	sulfotransferase family cytosolic 2B member 1-like
LOC104910815	10	4	8	7	9	5	uncharacterized LOC104910815
SYT2	8	7	6	3	3	5	synaptotagmin II
CCL24	3	4	2	27	3	5	chemokine (C-C motif) ligand 21
LOC104909400	5	3	7	4	4	5	teneurin-4-like
LOC100540249	6	6	8	6	6	5	lysine-specific demethylase 3B
LOC100548568	3	7	1	6	5	5	protein FAM188B2
BRINP1	3	4	3	4	2	5	BRICHOS domain containing 5
ATP10B	6	13	7	8	4	5	ATPase, class V, type 10B
LOC104914636	10	5	8	10	13	5	uncharacterized LOC104914636
ABCB5	12	10	11	9	8	5	ATP-binding cassette, sub-family B (MDR/TAP), member 5
LOC104913704	8	5	5	5	4	5	uncharacterized LOC104913704
LOC104911652	0	2	1	1	2	5	uncharacterized LOC104911652
LOC100303670	2	3	5	5	3	5	ubiquitin-associated protein 2
LOC104910429	4	7	8	4	3	5	uncharacterized LOC104910429
LOC104916491	7	3	5	5	4	5	glutamate receptor ionotropic, NMDA 3A-like
NRSN2	4	12	5	14	8	5	neurexin 2
LOC104912429	8	7	7	8	4	5	protein Hook homolog 1-like
LOC104914371	1	1	1	2	1	5	uncharacterized LOC104914371
LOC104914050	11	12	9	4	10	5	uncharacterized LOC104914050
DOK3	3	3	4	3	5	5	docking protein 2, 56kDa
LOC104915085	3	3	1	3	4	5	transient receptor potential cation channel subfamily M member 6-like
HOXD10	2	6	6	3	2	5	homeobox C8
TFAP2C	6	3	3	4	2	5	transcription factor AP-2 gamma (activating enhancer binding protein 2 gamma)
CHST4	6	6	4	6	9	5	carbohydrate (chondroitin 6) sulfotransferase 3
LOC100550020	6	6	9	10	11	5	heat shock 70 kDa protein 12A-like
LOC104912930	3	3	3	5	7	5	putative ATP-dependent RNA helicase TDRD12
CYP3A37	4	3	5	4	7	5	cytochrome P450, family 1, subfamily A, polypeptide 5
LOC104917455	9	16	6	8	21	5	uncharacterized LOC104917455
LOC104910396	26	17	13	10	13	5	uncharacterized LOC104910396
IL23A	0	4	3	2	3	5	interleukin 22 receptor, alpha 2
LOC104914194	3	7	3	7	3	5	uncharacterized LOC104914194
LOC104916422	5	3	2	4	12	5	uncharacterized LOC104916422
LOC104914168	9	4	9	5	7	5	serine/arginine repetitive matrix protein 2-like
TMEM88B	12	9	8	7	4	5	transmembrane protein 88B
LOC104909639	6	4	7	5	4	5	uncharacterized LOC104909639
LOC104910152	3	3	6	3	3	5	uncharacterized LOC104910152
LOC104915507	4	2	2	4	1	5	protocadherin alpha-13-like
GRXCR2	3	2	3	2	1	5	glutaredoxin, cysteine rich 1
LOC104916967	20	14	13	14	17	5	integrin alpha-3-like
LOC104916983	2	7	5	3	1	5	uncharacterized LOC104916983
LOC104917547	1	2	1	5	2	5	uncharacterized LOC104917547
LOC104911204	15	10	10	6	8	5	uncharacterized LOC104911204
TXK	15	9	8	10	8	5	TXK tyrosine kinase
S100A14	9	5	9	5	4	5	S100 calcium binding protein A14
LOC104917219	7	10	3	3	2	5	myosin-7-like
LOC104914230	5	3	5	3	5	5	uncharacterized LOC104914230
LOC104911225	5	8	6	8	7	5	uncharacterized LOC104911225
LOC100548930	5	7	4	5	5	5	uncharacterized LOC100548929
PIRT	0	2	1	3	1	5	phosphoinositide-interacting regulator of transient receptor potential channels
GDF11	6	5	1	4	2	5	growth differentiation factor 10
SERPINA10	3	3	3	4	3	5	serpin peptidase inhibitor, clade A (alpha-1 antitrypsin), member 10
TULP1	8	15	6	34	2	5	tubby like protein 1
LOC104914266	2	4	6	6	4	5	oxysterol-binding protein 1-like
LOC104911625	3	9	3	5	4	5	uncharacterized LOC104911625
LOC104915659	12	1	1	2	7	5	E3 SUMO-protein ligase RanBP2-like
LOC104911196	3	4	6	4	4	5	uncharacterized LOC104911196
LOC104912950	3	3	5	1	1	5	uncharacterized LOC104912950
LOC104911880	19	11	15	8	12	5	uncharacterized LOC104911880
LOC100548327	8	6	2	9	6	5	cytochrome P450 2D17
LOC104914523	6	5	6	6	6	5	metabotropic glutamate receptor 4-like
CREB3L3	4	8	8	5	4	5	cAMP responsive element binding protein 3-like 2
TRIM66	2	1	1	3	2	5	tripartite motif containing 66
LOC104913899	3	7	2	8	10	5	uncharacterized LOC104913899
LOC104910723	5	5	4	1	6	5	uncharacterized LOC104910723
LOC104910465	7	5	2	5	5	5	uncharacterized LOC104910465
LOC104910366	3	4	3	1	1	5	uncharacterized LOC104910366
SLITRK3	5	8	3	4	2	5	SLIT and NTRK-like family, member 3
ASPDH	9	4	4	3	6	5	aspartate dehydrogenase domain containing
SLC26A3	4	4	2	2	3	5	solute carrier family 26 (anion exchanger), member 3
SLC51A	3	3	4	3	3	5	solute carrier family 51, alpha subunit
SMIM24	7	4	4	5	3	5	small integral membrane protein 24
LOC104910301	13	5	11	2	10	5	uncharacterized LOC104910301

LOC104917530	1	4	2	5	1	4	uncharacterized LOC104917530
LOC104911685	2	4	4	2	2	4	uncharacterized LOC104911685
GPR115	10	10	9	9	7	4	G protein-coupled receptor 114
SLC9A3							solute carrier family 9, subfamily A (NHE3, cation proton antiporter 3), member 3
LOC104910731	2	5	3	3	2	4	uncharacterized LOC104910731
CTCF	4	6	1	4	1	4	uncharacterized LOC104910731
LOC104910849		3	3	3	4	4	CCCTC-binding factor (zinc finger protein)
	7	6	8	6	3	4	solute carrier family 2, facilitated glucose transporter member 9-like
LOC104911893	1	4	5	3	3	4	uncharacterized LOC104911893
LOC104913998	2	1	1	2	2	4	uncharacterized LOC104913998
GRIK3	3	3	3	2	1	4	glutamate receptor, ionotropic, kainate 1
MYO3B	6	4	3	6	1	4	myosin IIIB
LOC104915764	3	7	1	5	3	4	myosin light chain kinase, smooth muscle-like
HOXB8	2	4	4	2	5	4	homeobox B5
LOC104911511	3	0	4	2	1	4	uncharacterized LOC104911511
LOC104911972	8	4	7	7	2	4	uncharacterized LOC104911972
ELMOD1	0	3	0	2	1	4	engulfment and cell motility 3
LOC100550610	2	5	6	4	2	4	alpha-2Da adrenergic receptor-like
LOC100539604	6	3	1	2	15	4	oxytocin/neurophysin 1 prepropeptide
LOC104911993	7	2	5	7	2	4	uncharacterized LOC104911993
LOC104911022							
	5	4	2	4	4	4	potassium voltage-gated channel subfamily C member 1 pseudogene
SELPLG	13	6	11	9	13	4	selectin P ligand
LOC104909588	4	4	5	4	6	4	uncharacterized LOC104909588
LOC104912831	1	2	2	2	3	4	uncharacterized LOC104912831
LOC104911626	4	6	7	10	4	4	uncharacterized LOC104911626
LOC100549617	2	4	1	7	3	4	inner centromere protein pseudogene
LOC104912191	5	3	1	3	2	4	uncharacterized LOC104912191
LOC104910188	6	6	7	8	6	4	uncharacterized LOC104910188
LOC104916520	2	3	4	2	2	4	kelch-like protein 14
LOC104916506	1	2	2	3	2	4	uncharacterized LOC104916506
LOC104913074	2	2	2	1	2	4	uncharacterized LOC104913074
APOC3	7	7	6	4	6	4	apolipoprotein C-III
LOC104917336	7	2	4	5	4	4	insulin receptor substrate 2-like
SLITRK6	9	6	8	11	5	4	SLIT and NTRK-like family, member 6
SLC13A4							
	2	4	5	6	3	4	solute carrier family 13 (sodium/sulfate symporter), member 4
LOC104915196	5	3	5	4	3	4	uncharacterized LOC104915196
LOC104916949	6	3	3	3	7	4	homeobox protein Hox-D3-like
LOC104909551	2	4	2	3	4	4	uncharacterized LOC104909551
LOC104913156	7	2	3	4	3	4	uncharacterized LOC104913156
ADTRP	6	6	9	10	5	4	androgen-dependent TFPI-regulating protein
LOC100540282	4	2	3	7	3	4	synaptotagmin-9-like
KLHL35	2	1	3	2	2	4	kelch-like family member 34
LOC104910539	2	2	2	3	3	4	uncharacterized LOC104910539
BCL11B	3	3	5	5	2	4	B-cell CLL/lymphoma 11B (zinc finger protein)
LOC104914859	6	8	8	7	2	4	uncharacterized LOC104914859
LOC104909468	3	2	2	3	1	4	uncharacterized LOC104909468
LOC104910618	8	3	4	4	10	4	uncharacterized LOC104910618
LOC100541187	8	7	9	10	9	4	G-protein coupled receptor 183-like
LOC104911037	10	6	12	9	4	4	solute carrier family 22 member 18-like
CCR6	10	9	3	4	11	4	chemokine (C-C motif) receptor 5
LOC104915505	5	9	7	7	7	4	occludin-like
GABRR2	4	4	10	5	7	4	gamma-aminobutyric acid (GABA) A receptor, rho 1
TNFRSF13B	2	2	3	2	1	4	tumor necrosis factor receptor superfamily, member 13B
CLU1	4	2	5	3	1	4	clustered mitochondria (cluA/CLU1) homolog
NACAD	10	7	8	5	10	4	NAC alpha domain containing
LOC100540306	10	6	9	7	8	4	Golgi integral membrane protein 4-like
LOC104914065	2	4	3	2	4	4	pendrin-like
MANSC4	3	2	2	1	1	4	MANSC domain containing 4
LOC100539603	6	3	5	6	6	4	CCR4-NOT transcription complex subunit 6-like
LOC104914981	6	6	5	5	5	4	rho guanine nucleotide exchange factor 28-like
NKX6-2	5	3	5	2	1	4	NK6 homeobox 2
LOC104916291	5	3	5	5	4	4	sortilin-like
LOC104914447	1	7	3	8	3	4	selenium-binding protein 1-like
LOC104913948	8	2	3	5	2	4	uncharacterized LOC104913948
HOXB5	7	6	10	8	7	4	homeobox B3
TCF7	6	4	3	5	6	4	transcription factor 7 (T-cell specific, HMG-box)
LOC104915616	2	3	8	5	3	4	zinc finger CCH domain-containing protein 11A-like
LOC104912267	0	1	0	4	1	4	uncharacterized LOC104912267
HCRT							
	10	8	6	7	6	4	hyperpolarization activated cyclic nucleotide-gated potassium channel 4
NOX3	3	6	5	2	3	4	NADPH oxidase 3
LOC100545731	3	3	2	4	2	4	prolactin-releasing peptide receptor-like
LOC104912864	4	4	6	3	6	4	uncharacterized LOC104912864
FBXO47	4	5	4	5	5	4	F-box protein 45
LOC104913402	2	5	5	1	4	4	mesothelin-like
LOC104910105	4	3	4	2	2	4	synaptonemal complex protein 2-like

LOC104914480	3	4	3	9	5	4	uncharacterized LOC104914480
RAB25	6	7	7	8	2	4	RAB25, member RAS oncogene family
LOC100549995	2	5	2	6	9	4	arylamine N-acetyltransferase, liver isozyme
BRSK2	7	6	3	5	4	4	bombesin-like receptor 3
LOC104916574	1	0	2	4	2	4	uncharacterized LOC104916574
LOC100541395	51	78	13	128	10	4	transcriptional enhancer factor TEF-3-like
LOC104914637	10	7	7	7	9	4	fibrillin-1-like
FER1L6	7	8	9	5	8	4	fer (fps/fes related) tyrosine kinase
CFAP58	2	2	2	2	4	4	cilia and flagella associated protein 57
LOC104911629	5	6	7	6	8	4	uncharacterized LOC104911629
LOC104912688	3	5	3	10	7	4	uncharacterized LOC104912688
LOC104910356	2	3	2	1	1	4	uncharacterized LOC104910356
TLR5	6	8	8	7	10	4	toll-like receptor 5
SYTL5	8	7	12	3	5	4	synaptotagmin-like 5
MC1R	4	5	5	4	4	4	melanocortin 1 receptor (alpha melanocyte stimulating hormone receptor)
ANO4	0	3	2	3	2	4	anoctamin 4
AMPH	16	9	13	8	18	4	amphiphysin
LOC104913687	7	4	4	3	7	4	uncharacterized LOC104913687
LOC104912664	7	5	2	8	4	4	mucin-4-like
LOC104916549	4	6	5	5	4	4	uncharacterized LOC104916549
LOC104915188	9	8	7	10	2	4	uncharacterized LOC104915188
LOC104912738	3	2	3	2	2	4	glucose-dependent insulinotropic receptor-like
LOC104910448	2	6	7	4	2	4	uncharacterized LOC104910448
LOC104917035	2	3	1	2	1	4	maestro heat-like repeat-containing protein family member 1
AGXT2	3	3	6	2	1	4	alanine--glyoxylate aminotransferase 2
LOC100539757	3	1	5	3	9	4	carbonic anhydrase 2
LOC104912349	5	7	6	7	3	4	uncharacterized LOC104912349
SLC35D3	8	5	4	5	3	4	solute carrier family 35, member D3
LOC104916909	1	5	1	3	1	4	cytochrome P450 2C31-like
LOC104913664	13	7	8	5	8	4	uncharacterized LOC104913664
LOC100546609	6	10	10	13	7	4	probable cation-transporting ATPase 13A4
LOC104916934	8	4	2	2	5	4	probable N-acetyltransferase CML3
LOC104910691	7	6	6	7	5	4	teneurin-3-like
PMEL	7	5	8	4	4	4	premelanosome protein
LOC100543777	3	5	6	3	4	4	cytochrome b-245 heavy chain
LOC104911476	2	3	3	2	3	4	uncharacterized LOC104911476
LOC104913275	3	2	2	3	2	4	uncharacterized LOC104913275
LOC104913424	6	1	3	2	2	4	uncharacterized LOC104913424
LOC104912873	15	11	13	8	11	4	uncharacterized LOC104912873
LOC104915517	5	4	1	4	6	4	uncharacterized LOC104915517
LOC104915205	7	6	7	7	3	4	uncharacterized LOC104915205
LOC100542678	3	3	3	2	3	4	solute carrier family 16 member 10
COL9A1	3	255	43	12	2	4	collagen, type VIII, alpha 2
CDH1	14	10	15	7	6	4	CUB domain containing protein 2
CNTNAP2	6	7	4	6	7	4	contactin associated protein 1
LOC104915470	3	7	5	9	4	4	nebulin-like
LOC100547424	8	8	4	6	10	4	MAX gene-associated protein
IRX4	3	6	5	7	8	4	iroquois homeobox 1
CDH6	10	7	6	8	6	4	cadherin 5, type 2 (vascular endothelium)
ABCG4	3	1	3	2	3	4	ATP-binding cassette, sub-family G (WHITE), member 4
LOC100547434	3	4	5	2	2	4	BTB/POZ domain-containing protein KCTD16-like
LOC104916991	5	6	6	4	5	4	uncharacterized LOC104916991
LOC100549687	3	3	6	3	4	4	adrenodoxin-like
LOC100541927	5	3	4	4	2	4	olfactory receptor-like protein COR4
PDE6B	7	10	7	7	4	4	phosphodiesterase 6B, cGMP-specific, rod, beta
LOC100539397	5	14	12	4	14	4	ankyrin repeat domain-containing protein 42-like
GATA3	9	7	8	9	9	4	GATA binding protein 2
LOC104913575	5	3	4	5	4	4	uncharacterized LOC104913575
LOC104914248	1	2	1	2	2	4	uncharacterized LOC104914248
CFAP69	3	3	7	5	2	4	cilia and flagella associated protein 61
STMN4	7	8	6	3	2	4	stathmin-like 4
CRH	17	7	15	4	4	4	cAMP responsive element modulator
LOC104911840	4	4	9	7	11	4	uncharacterized LOC104911840
FAM178B	2	5	3	4	0	4	family with sequence similarity 178, member A
SYK	19	10	12	10	9	4	spleen tyrosine kinase
EPHX4	17	5	8	3	5	4	epoxide hydrolase 2, cytoplasmic
LOC100548666	4	4	3	6	2	4	disintegrin and metalloproteinase domain-containing protein 21-like
LOC104911756	8	4	4	2	6	4	indian hedgehog protein
ADRB3	2	3	1	3	1	4	adrenoceptor beta 3
COL25A1	8	10	5	5	4	4	collagen, type XXIV, alpha 1
LOC104909455	8	3	6	2	1	4	vinculin-like
C12H15orf59	2	5	2	2	6	4	chromosome 12 open reading frame, human C15orf48
LOC104913278	4	5	5	4	6	4	uncharacterized LOC104913278
LOC104912973	3	5	5	4	4	4	protein NLRC5-like
PVRL4	6	8	7	6	4	4	poliovirus receptor-related 4
LOC104910428	7	6	8	6	3	4	uncharacterized LOC104910428

LOC104913850	7	5	7	3	2	4	uncharacterized LOC104913850
LOC104911048	10	6	5	12	23	4	uncharacterized LOC104911048
LOC104910374	2	1	4	2	4	4	uncharacterized LOC104910374
IL20RB	3	4	3	3	5	4	interleukin 20 receptor, alpha
LOC100542049	10	5	10	3	3	4	histone H4
LOC104914540	19	20	9	14	15	4	trefoil factor 2-like
GRM8	5	5	6	7	5	4	glutamate receptor, metabotropic 7
LOC104911908	3	3	3	2	5	4	uncharacterized LOC104911908
LOC100542763	2	3	6	1	4	4	ubiquitin carboxyl-terminal hydrolase 22-A
LOC104913604	11	5	7	4	4	4	uncharacterized LOC104913604
LOC104913341	4	6	1	3	3	4	uncharacterized LOC104913341
SUSD3	12	6	9	7	5	4	sushi domain containing 3
LOC100546995	12	4	8	4	3	4	cysteine-rich protein 2-like
LOC104913528	4	8	7	8	2	4	uncharacterized LOC104913528
SLC4A9	2	3	3	3	1	4	solute carrier family 4, sodium bicarbonate cotransporter, member 9
HAPLN1	3	6	11	2	1	4	huntingtin-associated protein 1
LOC104915600	4	13	11	2	4	4	scavenger receptor cysteine-rich type 1 protein M130-like
LOC100549788	6	7	5	10	9	4	E3 ubiquitin-protein ligase NRD1-like
KIF12	4	5	4	6	8	4	kinesin family member 11
SCRG1	7	6	4	5	6	4	stimulator of chondrogenesis 1
LOC104909891	6	3	4	2	3	4	uncharacterized LOC104909891
LOC104913282	3	5	2	4	3	4	uncharacterized LOC104913282
HAPLN2	3	6	3	4	1	4	hyaluronan and proteoglycan link protein 1
LOC104912262	6	4	4	4	7	4	uncharacterized LOC104912262
LOC104913783	0	3	2	3	0	4	uncharacterized LOC104913783
CCR10	4	3	6	5	5	4	cell cycle progression 1
MAL2	3	6	6	4	4	4	mal, T-cell differentiation protein 2
LOC100541074	5	3	2	5	3	4	formin-I-like
LOC104912236	4	3	4	1	2	4	uncharacterized LOC104912236
CLRN3	6	5	5	5	4	4	clarin 2
RFX4	3	6	6	4	3	4	regulatory factor X, 4 (influences HLA class II expression)
LOC100546620	3	5	5	3	4	4	protocadherin-10-like
LOC104916109	4	2	4	2	4	4	zinc transporter ZIP5-like
LOC104910995	0	2	1	1	2	4	tubulin alpha chain-like
LOC104910635	12	6	7	3	4	4	uncharacterized LOC104910635
LOC104916529	3	5	3	5	5	4	uncharacterized LOC104916529
LOC104915666	5	4	1	2	2	4	uncharacterized LOC104915666
LOC100539922	0	1	3	2	2	4	solute carrier family 22 member 18-like
LOC104910594	7	7	3	4	6	4	uncharacterized LOC104910594
LOC104911943	6	4	3	5	1	4	uncharacterized LOC104911943
LOC104914645	6	5	4	3	4	4	maestro heat-like repeat-containing protein family member 2B
PDIA2	1	3	2	1	1	4	protein disulfide isomerase family A, member 2
LOC100542130	1	3	2	3	2	4	AP-1 complex-associated regulatory protein-like
LOC104909774	2	3	5	3	2	4	receptor-type tyrosine-protein phosphatase kappa-like
BFSP1	2	6	4	7	2	4	beaded filament structural protein 1, filensin
LOC100546746	5	7	5	6	5	4	transmembrane protein 45B
GABRG3	1	4	2	5	4	4	gamma-aminobutyric acid (GABA) A receptor, gamma 2
HNF4A	4	4	4	2	4	4	HNF1 homeobox B
LOC104915044	4	4	4	2	1	4	sperm-associated antigen 4 protein-like
LOC104913244	5	1	2	4	6	4	uncharacterized LOC104913244
LOC100545122	13	6	15	9	11	4	torsin-1A-interacting protein 2-like
LOC104911565	4	4	4	7	6	4	probable G-protein coupled receptor 141
LOC104911243	1	6	3	6	4	4	uncharacterized LOC104911243
FAM181A	2	3	3	2	4	4	family with sequence similarity 180, member B
LOC104911420	2	2	2	3	2	4	uncharacterized LOC104911420
LOC104909211	7	11	5	12	1	4	protein piccolo-like
LOC104910664	0	1	2	1	1	4	uncharacterized LOC104910664
BLK	4	4	4	4	7	4	BLK proto-oncogene, Src family tyrosine kinase
ARAP2	6	5	4	5	7	4	ArfGAP with RhoGAP domain, ankyrin repeat and PH domain 2
LOC104916780	4	5	6	5	4	4	leucine-rich repeat-containing G-protein coupled receptor 4 pseudogene
LOC104909240	4	11	4	7	6	4	macrophage mannose receptor 1-like
LOC104911110	6	4	7	6	4	4	uncharacterized LOC104911110
LOC100544046	2	3	0	5	3	4	myosin-8-like
LOC104910011	3	7	4	4	3	4	uncharacterized LOC104910011
LOC100551358	4	10	5	4	2	4	gap junction alpha-3 protein-like
LOC104909864	3	1	5	3	1	4	PR domain zinc finger protein 1
STOX1	7	4	5	5	4	4	storkhead box 1
LRRC55	2	1	1	1	2	4	leucine rich repeat containing 55
DIRAS1	8	8	4	5	3	4	DIP2 disco-interacting protein 2 homolog C (Drosophila)
LOC104917436	3	5	5	3	2	4	UDP-glucose:glycoprotein glucosyltransferase 2-like
LOC104910884	0	1	0	1	0	4	uncharacterized LOC104910884
LOC104910104	4	5	3	5	5	4	synaptonemal complex protein 2-like
LOC104916980	6	6	3	6	4	4	neurogenic locus notch homolog protein 4-like
LOC104915518	5	12	3	13	3	4	uncharacterized LOC104915518
HOXD12	3	2	2	0	2	4	homeobox D11

LOC100541145						4	mitochondrial import inner membrane translocase subunit TIM14
	2	2	2	2	2		pseudogene
LOC104911872	5	4	6	5	2	4	uncharacterized LOC104911872
LOC100550975	1	2	4	4	2	4	adenosine receptor A3
LOC100543299	15	5	10	3	5	4	tubulin beta-4B chain-like
KCNH4							
	0	2	2	1	4	4	potassium voltage-gated channel, subfamily H (eag-related), member 2
SYPL1	3	2	0	4	3	4	synaptophysin-like 1
ALDH8A1	3	2	4	2	2	4	aldehyde dehydrogenase 8 family, member A1
LOC100538764	7	6	4	5	2	4	protein kinase C zeta type
LOC104917043	2	1	2	0	2	4	uncharacterized LOC104917043
LOC104912242	2	1	2	1	2	4	uncharacterized LOC104912242
LOC104909390	5	4	6	3	5	4	alkaline ceramidase 3-like
LOC104914377	3	4	5	4	4	4	uncharacterized LOC104914377
AMBP	4	4	5	1	4	4	alpha-1-microglobulin/bikunin precursor
SPOCK1							
	3	3	3	4	2	4	sparc/osteonectin, cwcv and kazal-like domains proteoglycan (testican) 1
LOC104911727	6	5	1	5	8	4	myosin-IIb-like
LOC104911758	2	4	6	5	6	4	receptor-type tyrosine-protein phosphatase O-like
LOC104911878	5	4	4	4	5	4	uncharacterized LOC104911878
LOC100545106	3	2	2	2	4	4	CUB and sushi domain-containing protein 1-like
LOC104917007	7	6	7	3	3	4	uncharacterized LOC104917007
LOC104910787	3	3	6	6	2	4	uncharacterized LOC104910787
LOC100543156	2	1	1	1	1	4	cytochrome P450 2U1
LOC104913062	3	2	1	2	0	4	cadherin-1
LOC104917545	5	5	7	6	3	4	uncharacterized LOC104917545
LOC104913054	4	3	8	3	2	4	uncharacterized LOC104913054
IL22RA2	2	2	3	3	2	4	interleukin 22 receptor, alpha 1
LOC104911941	2	3	3	2	1	4	uncharacterized LOC104911941
LRIT3							
	13	4	9	3	6	4	leucine-rich repeat, immunoglobulin-like and transmembrane domains 3
LOC104913806	0	3	1	2	3	4	uncharacterized LOC104913806
TNFSF15	6	1	3	5	3	4	tumor necrosis factor (ligand) superfamily, member 15
LOC104912948	2	4	3	3	3	4	uncharacterized LOC104912948
LOC100540083	6	11	8	8	9	4	xaa-Pro dipeptidase
LOC104913562	3	3	2	3	4	4	uncharacterized LOC104913562
LOC104912174	2	3	1	2	3	4	uncharacterized LOC104912174
LOC104912137	3	2	2	2	3	4	disks large homolog 3-like
LOC104912008	3	2	2	2	2	4	transcription factor SOX-5-like
GPR26	1	2	1	1	0	4	G protein-coupled receptor 22
LOC104911955	4	4	7	6	2	4	cytochrome P450 2H2
LOC104912159	10	5	10	5	3	4	plakophilin-2-like
CAPN14	2	5	3	4	3	4	calpain 13
GPR114	6	2	2	4	3	4	G protein-coupled receptor 112
SLAIN1	2	4	3	1	3	4	SLAIN motif family, member 1
SPIRE2	14	9	9	21	16	4	spire-type actin nucleation factor 2
LOC104913499	5	4	4	4	6	4	protein sidekick-1-like
LOC100550893	7	4	8	3	5	4	taste receptor type 2 member 9-like
LOC104909488	9	3	7	2	4	4	uncharacterized LOC104909488
LOC100548691	14	11	8	3	3	4	cullin-9-like
LOC104915074	3	2	2	4	3	4	guanine deaminase-like
LOC100539136	2	3	3	2	2	4	lysozyme g
LOC104910216	7	4	6	6	6	4	uncharacterized LOC104910216
LOC100547971							
	1	4	2	6	2	4	erythroblast NAD(P)(+)-arginine ADP-ribosyltransferase-like
LOC104914789	5	4	3	3	4	4	uncharacterized LOC104914789
LOC100539980	4	3	4	2	2	4	tubulin alpha-1B chain
TP53TG5	5	9	6	6	7	4	TP53 target 5
LOC104911100	2	4	4	4	3	4	uncharacterized LOC104911100
LOC104913519	3	2	3	4	5	4	uncharacterized LOC104913519
LOC104917496	4	3	4	3	5	4	uncharacterized LOC104917496
LRP2	14	6	7	6	5	4	low density lipoprotein receptor-related protein 2
LOC104912575	3	2	2	2	1	4	uncharacterized LOC104912575
LOC104910212	21	14	13	9	9	4	gamma-aminobutyric acid type B receptor subunit 2-like
TMEM179	1	1	1	0	1	4	transmembrane protein 179
LOC104913435	8	4	4	7	12	4	uncharacterized LOC104913435
LOC104910060	3	2	2	1	1	4	fibrocystin-like
LOC104917603	0	3	2	2	6	4	uncharacterized LOC104917603
LOC100547096	5	6	5	4	4	4	HMG box-containing protein 1-like
CTXN2	3	3	3	4	4	4	cortixin 1
LOC104910003	2	3	3	3	3	4	uncharacterized LOC104910003
LOC104914795	1	2	2	2	2	4	killer cell lectin-like receptor subfamily G member 1
LRRC6	3	4	3	4	2	4	leucine rich repeat containing 6
TMPPRS4	1	1	1	1	1	4	transmembrane protease, serine 4
LOC104912376	2	3	1	1	1	4	potassium channel subfamily T member 2-like
LOC104914781	5	2	2	2	3	4	uncharacterized LOC104914781
LOC104914797	1	2	2	5	4	4	B-cell differentiation antigen CD72-like
SLC18A2							
	4	11	8	22	10	4	solute carrier family 18 (vesicular monoamine transporter), member 2

BNC1	17	4	9	2	5	4	basonuclin 1
LOC104913491	3	2	6	3	5	4	uncharacterized LOC104913491
CABP2	6	4	2	2	2	4	calcium binding protein 1
CCL19	0	3	4	6	0	4	chemokine (C-C motif) ligand 17
LOC104912181	5	7	9	5	5	4	uncharacterized LOC104912181
LOC104911976	4	5	6	4	3	4	uncharacterized LOC104911976
C8H10orf90	13	6	9	6	3	4	chromosome 8 open reading frame, human C10orf88
LOC104912307	2	2	2	0	2	4	uncharacterized LOC104912307
LOC104914557	2	3	3	5	2	4	Ig-like V-type domain-containing protein FAM187A
LOC104911154	6	4	4	4	2	4	uncharacterized LOC104911154
IRX1	3	7	4	3	1	4	insulin receptor substrate 4
LOC104914066	2	4	6	3	1	4	uncharacterized LOC104914066
LOC104912598	9	5	7	5	9	4	uncharacterized LOC104912598
NEU2	5	4	5	2	2	4	sialidase 2 (cytosolic sialidase)
WNT7A	23	3	18	2	5	4	wingless-type MMTV integration site family, member 7A
LOC104917394	5	3	3	6	13	4	neurofilament medium polypeptide-like
XDH	7	4	5	8	7	4	xanthine dehydrogenase
LOC104911635	3	3	4	5	5	4	uncharacterized LOC104911635
LOC100546242	3	2	4	5	5	4	UPF0762 protein C6orf58 homolog
LOC104912830	6	3	6	3	5	4	uncharacterized LOC104912830
FAM132A	17	10	1	11	2	4	family with sequence similarity 131, member B
LOC104911370	6	6	7	5	2	4	uncharacterized LOC104911370
LOC100549159	5	4	3	4	2	4	glutaminyl-peptide cyclotransferase-like protein
LACC1	5	7	7	8	17	4	l(3)mbt-like 2 (Drosophila)
LOC104911828	1	1	0	1	0	4	uncharacterized LOC104911828
TRPC5							
	3	2	2	4	5	4	transient receptor potential cation channel, subfamily C, member 5
LOC100543920	1	1	2	1	1	4	tyrosine-protein kinase Fyn
LOC104910992	11	9	5	5	6	4	uncharacterized LOC104910992
SLC14A2	2	4	5	5	1	4	solute carrier family 14 (urea transporter), member 2
CALHM3	1	2	1	1	1	4	calcium homeostasis modulator 2
LOC104913984	2	5	4	3	2	4	myosin-7B-like
LOC104912812	2	6	6	7	8	4	uncharacterized LOC104912812
C1H11orf70	4	6	5	4	4	4	chromosome 1 open reading frame, human C11orf54
TTC34	5	3	5	4	3	4	tetratricopeptide repeat domain 34
SLITRK5	4	4	4	4	3	4	SLIT and NTRK-like family, member 5
CFAP74	15	9	14	6	10	4	cilia and flagella associated protein 69
LOC104911449	5	6	7	6	8	4	nebulette-like
LRRC34	4	6	4	5	4	4	leucine rich repeat containing 34
PKDREJ	4	3	4	3	4	4	polycystin (PKD) family receptor for egg jelly
SRMS							src-related kinase lacking C-terminal regulatory tyrosine and N-terminal
	3	3	9	4	6	4	myristylation sites
FAM124A	6	2	3	1	5	4	family with sequence similarity 122B
CCDC81	4	4	4	4	3	4	coiled-coil domain containing 80
LOC104912938	9	3	4	3	5	4	uncharacterized LOC104912938
LOC104911081	2	4	9	6	4	4	uncharacterized LOC104911081
TCERG1L	2	3	5	2	1	4	transcription elongation regulator 1-like
P2RY12	9	6	4	9	8	4	purinergic receptor P2Y, G-protein coupled, 12
SHOX	5	3	5	6	6	4	short stature homeobox
LOC104912722	15	3	8	2	6	4	anoctamin-2-like
LOC104909702	9	2	7	1	5	4	uncharacterized LOC104909702
LOC104910161	10	6	8	1	4	4	uncharacterized LOC104910161
LOC104909681	3	2	5	1	3	4	uncharacterized LOC104909681
LOC104911096	1	2	5	2	6	4	uncharacterized LOC104911096
LOC104912366	2	4	2	2	2	4	uncharacterized LOC104912366
LOC104915347	3	2	1	3	2	4	uncharacterized LOC104915347
LOC100546529	3	3	3	2	1	4	delta-1 crystallin
LOC104917572	5	4	4	3	5	4	uncharacterized LOC104917572
LOC104909490	5	3	3	4	5	4	uncharacterized LOC104909490
LOC104909931	0	3	1	3	1	4	uncharacterized LOC104909931
LOC104912168	1	4	1	2	1	4	uncharacterized LOC104912168
CR1	18	8	8	10	10	4	carboxypeptidase X (M14 family), member 2
LOC100543189							serine/threonine-protein phosphatase 2B catalytic subunit gamma
	5	5	4	4	3	4	isoform-like
LOC104912521	0	4	0	4	1	4	uncharacterized LOC104912521
LOC104915712	1	4	2	1	0	4	uncharacterized LOC104915712
LOC104911323	4	7	6	4	4	4	uncharacterized LOC104911323
EPHA8	0	3	1	1	1	4	EPH receptor A7
AGMAT	3	4	4	3	7	3	agmatine ureohydrolase (agmatinase)
LOC100544657	1	3	0	4	4	3	inorganic pyrophosphatase-like
STMN3	3	4	7	3	2	3	stathmin-like 3
LOC104913885							
	3	2	2	2	2	3	scavenger receptor cysteine-rich domain-containing group B protein-like
LOC104912211	2	2	2	2	4	3	testis-specific serine/threonine-protein kinase 6-like
LOC104913945	5	3	3	3	4	3	uncharacterized LOC104913945
LOC104912360	2	1	5	1	4	3	ATP synthase subunit alpha, mitochondrial-like
GJB2	2	1	6	1	3	3	gap junction protein, beta 1, 32kDa
POU3F2	2	3	1	1	1	3	POU class 3 homeobox 2
LOC100543030	1	1	3	4	0	3	acetyl-CoA carboxylase-like

LOC104910167	0	0	0	1	0	3	uncharacterized LOC104910167
LOC104911627	10	1	12	1	11	3	uncharacterized LOC104911627
LOC100549991	2	3	3	4	2	3	phosphorylase b kinase regulatory subunit beta-like
NXP1	2	2	9	2	2	3	neurexophilin 1
CFAP57	2	1	2	2	1	3	cilia and flagella associated 54
LOC104912620	2	2	2	2	1	3	uncharacterized LOC104912620
LOC104914484	2	3	4	5	3	3	uncharacterized LOC104914484
RAPGEFL1	1	4	2	2	2	3	Rap guanine nucleotide exchange factor (GEF)-like 1
LOC104911500	6	3	6	9	4	3	uncharacterized LOC104911500
LOC104911026	2	2	3	4	4	3	harmonin-like
LIN28B	10	5	12	6	3	3	lin-28 homolog A (C. elegans)
LOC104913524	2	2	2	2	3	3	uncharacterized LOC104913524
LOC104913252	2	3	4	3	2	3	uncharacterized LOC104913252
LOC104911160	1	3	4	2	2	3	uncharacterized LOC104911160
LOC100546438	1	1	1	1	1	3	low-density lipoprotein receptor-related protein 1-like
SLC35F4	2	6	2	1	1	3	solute carrier family 35, member F4
MRAP2	4	7	6	3	5	3	melanocortin 2 receptor accessory protein 2
LOC100550270	0	3	3	2	3	3	uncharacterized LOC100550270
LOC104914295	3	2	1	3	2	3	uncharacterized LOC104914295
LOC104912388	5	5	3	2	2	3	astrotactin-1-like
CSMD2	7	10	3	13	5	3	CUB and Sushi multiple domains 1
ERP27	3	5	5	4	3	3	ERO1-like beta (S. cerevisiae)
NEIL2	3	0	1	1	3	3	nei endonuclease VIII-like 2 (E. coli)
HKDC1	1	5	1	5	2	3	hexokinase 3 (white cell)
LOC100542853	3	1	0	1	1	3	TBC1 domain family member 5
LOC104915061							
	1	1	1	2	1	3	transient receptor potential cation channel subfamily M member 3-like
LOC104911072	4	2	5	3	6	3	uncharacterized LOC104911072
LOC104910971	4	8	3	6	4	3	uncharacterized LOC104910971
LOC100544139	1	3	3	1	3	3	myc box-dependent-interacting protein 1
LOC104913529	3	5	4	3	2	3	uncharacterized LOC104913529
LOC104909904	3	3	1	3	1	3	uncharacterized LOC104909904
IL18RAP	6	3	2	2	6	3	interleukin 18 receptor 1
LOC104917122	5	14	5	7	8	3	IgGfC-binding protein-like
ARHGAP8	11	4	4	4	7	3	Rho GTPase activating protein 8
LOC104912324	6	4	7	4	5	3	uncharacterized LOC104912324
LOC104913571	2	2	3	2	4	3	tetratricopeptide repeat protein 28-like
LOC104914187	7	3	1	1	2	3	arylacetamide deacetylase-like 4
LOC104917297	4	1	5	3	2	3	uncharacterized LOC104917297
LOC104914673	2	3	3	2	1	3	nuclear factor interleukin-3-regulated protein-like
LOC104912904	0	2	1	1	1	3	ras and EF-hand domain-containing protein-like
LOC100539746	4	8	9	11	12	3	probable ATP-dependent RNA helicase DDX10
LOC104917499	5	6	6	6	5	3	uncharacterized LOC104917499
LOC104911036							
	5	5	10	5	3	3	potassium voltage-gated channel subfamily KQT member 1-like
LOC104916771	0	4	2	2	2	3	uncharacterized LOC104916771
SLC7A9							
	2	1	2	1	2	3	solute carrier family 7 (amino acid transporter light chain, bo,+ system), member 9
LOC104911016	2	2	2	3	2	3	receptor-type tyrosine-protein phosphatase eta-like
LYZ	4	2	1	20	0	3	lysozyme
LOC104917421	5	5	2	6	9	3	uncharacterized LOC104917421
LOC104916894	11	10	8	8	8	3	uncharacterized LOC104916894
LOC104915656							
	10	5	2	3	6	3	maestro heat-like repeat-containing protein family member 2B
LOC104911490	2	4	3	1	5	3	uncharacterized LOC104911490
MEP1A	2	3	8	3	5	3	meprin A, alpha (PABA peptide hydrolase)
TMIGD1	4	1	3	5	3	3	transmembrane and immunoglobulin domain containing 1
LRRTM1	2	3	1	1	3	3	leucine rich repeat transmembrane neuronal 1
SATB2	4	2	1	1	2	3	SATB homeobox 2
LOC104911326	5	4	3	5	2	3	cathelicidin-3
CABP1	4	7	4	4	5	3	Cdk5 and Abl enzyme substrate 2
LOC104911811	2	1	1	3	5	3	uncharacterized LOC104911811
LOC104914641	4	0	3	0	3	3	uncharacterized LOC104914641
LOC104915158	0	5	0	2	0	3	uncharacterized LOC104915158
LOC104910294	4	3	2	6	5	3	uncharacterized LOC104910294
LOC104911185	2	8	7	5	3	3	uncharacterized LOC104911185
LOC104911996	2	4	3	2	2	3	uncharacterized LOC104911996
DCT	3	1	2	3	2	3	dendrocyte expressed seven transmembrane protein
IL1RN	2	2	5	4	2	3	interleukin 1 receptor-like 1
LOC104913129	2	2	2	2	2	3	uncharacterized LOC104913129
LOC104910215	3	2	2	4	1	3	uncharacterized LOC104910215
LOC104911896	0	1	2	2	1	3	protein FAM13C-like
LOC104915407	5	2	2	2	8	3	interleukin-12 receptor subunit beta-1-like
LOC104910270	3	2	4	1	3	3	uncharacterized LOC104910270
LOC104912981	4	1	4	3	3	3	uncharacterized LOC104912981
LOC104910651	0	1	1	1	1	3	uncharacterized LOC104910651
LOC104914409	4	3	7	3	5	3	uncharacterized LOC104914409
LOC104910885	4	7	5	5	4	3	uncharacterized LOC104910885
LOC104916834	1	1	1	1	2	3	uncharacterized LOC104916834

EFCAB11	5	5	5	8	5	3	EF-hand calcium binding domain 1
LOC104914343	3	4	5	4	3	3	uncharacterized LOC104914343
LOC104917581	3	4	3	3	2	3	neurobeachin-like
CSH14orf37	6	4	2	4	1	3	chromosome 5 open reading frame, human C14orf2
GPR68	12	9	9	5	21	3	G protein-coupled receptor 65
LOC100551166	3	7	3	8	3	3	leucine-rich repeat-containing protein 46-like
LOC104912492	3	2	1	2	2	3	inaD-like protein
XK	3	3	3	3	3	3	X-linked Kx blood group
LOC104911541	5	3	4	3	3	3	uncharacterized LOC104911541
LOC100547653	5	3	3	2	3	3	uncharacterized LOC100547642
LOC104909235	4	9	3	5	3	3	protein piccolo-like
LOC100539489	1	1	1	1	3	3	rab-like protein 2A
LOC104917423	2	2	3	2	2	3	sodium leak channel non-selective protein-like
LOC100539381	2	2	1	2	2	3	solute carrier family 35 member E2-like
GHSR	3	3	2	3	1	3	ghrelin/obestatin prepropeptide
LOC100544871	3	4	3	2	1	3	sodium channel protein type 1 subunit alpha-like
HTR3A	1	6	7	5	1	3	5-hydroxytryptamine (serotonin) receptor 2C, G protein-coupled
LOC104910903	0	4	1	4	1	3	uncharacterized LOC104910903
C2H2orf50	3	3	0	1	1	3	chromosome 2 open reading frame, human C2orf43
LOC104911140	0	4	0	3	0	3	uncharacterized LOC104911140
LOC100538901	4	6	4	5	3	3	dihydropyrimidine dehydrogenase [NADP(+)]-like
SLC4A10	5	7	9	4	2	3	solute carrier family 4, sodium bicarbonate transporter, member 10
LOC104909543	9	8	8	8	9	3	serine palmitoyltransferase 3-like
LOC104913592	10	11	9	8	7	3	uncharacterized LOC104913592
LOC100547762	5	4	5	4	5	3	beclin-1
FAM43B	4	4	7	4	4	3	family with sequence similarity 43, member A
LOC104909800	2	3	0	5	3	3	maestro heat-like repeat-containing protein family member 2B
LOC104912619	1	1	2	1	1	3	uncharacterized LOC104912619
VWC2L	5	6	7	5	13	3	von Willebrand factor C domain containing protein 2-like
LOC104912201	5	1	5	2	4	3	uncharacterized LOC104912201
TCP11	2	3	2	3	2	3	t-complex 11, testis-specific
LOC104914396	2	1	1	1	3	3	putative transporter ZK637.1
CDK3	1	1	2	2	2	3	cyclin-dependent kinase 2 associated protein 1
LOC104910405	2	19	3	14	2	3	uncharacterized LOC104910405
LOC104913406	3	2	4	2	1	3	voltage-dependent T-type calcium channel subunit alpha-1H-like
LOC104917286	4	1	2	1	1	3	uncharacterized LOC104917286
DYTN	0	1	1	0	1	3	dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 3
LOC104917016	13	6	10	9	9	3	dematin-like
LOC104911474	1	2	1	3	2	3	uncharacterized LOC104911474
DDC	2	3	3	2	1	3	damage-specific DNA binding protein 2, 48kDa
LOC104911411	4	2	2	2	0	3	calcitonin receptor-like
LOC100545914	1337	1124	5	1091	3384	3	RNA-binding protein Musashi homolog 2-like
LOC100539032	7	8	7	5	10	3	ubiquitin carboxyl-terminal hydrolase 34
CCR8	1	2	4	2	4	3	chemokine (C-C motif) receptor 7
LOC104910699	3	2	3	4	2	3	uncharacterized LOC104910699
KRBA1	2	2	1	2	2	3	Kirsten rat sarcoma viral oncogene homolog
LOC104909712	6	2	4	2	2	3	uncharacterized LOC104909712
LOC104911852	2	1	3	2	2	3	uncharacterized LOC104911852
LOC104910190	3	4	4	2	6	3	uncharacterized LOC104910190
LOC104912989	4	1	2	4	6	3	uncharacterized LOC104912989
LOC104916131	2	1	3	3	6	3	potassium voltage-gated channel subfamily G member 3 pseudogene
LOC104912234	2	5	4	1	4	3	uncharacterized LOC104912234
DPEP1	4	3	3	2	4	3	deleted in primary ciliary dyskinesia homolog (mouse)
CD28	4	3	5	3	3	3	CD276 molecule
LOC100546335	3	5	4	4	2	3	multidrug resistance-associated protein 1-like
LOC104910835	1	1	2	1	1	3	cytokine-dependent hematopoietic cell linker-like
CCDC96	3	1	2	1	0	3	coiled-coil domain containing 94
LOC104913725	10	2	11	2	4	3	myosin-7-like
HAP1	5	4	4	3	7	3	hydroxyacid oxidase 2 (long chain)
LOC104916545	2	3	3	1	5	3	uncharacterized LOC104916545
LOC100549494	6	3	3	3	2	3	myosin-7-like
PRR15L	1	3	2	2	2	3	proline rich 15-like
LOC104913073	0	1	6	0	1	3	ovostatin-like
RAG2	6	3	5	4	1	3	recombination activating gene 2
LOC104915958	5	5	5	5	7	3	uncharacterized LOC104915958
LOC104917456	4	3	4	4	5	3	uncharacterized LOC104917456
ANO9	3	2	2	1	3	3	anoctamin 9
LOC104910010	2	6	3	2	3	3	uncharacterized LOC104910010
LOC104914427	3	3	3	3	3	3	uncharacterized LOC104914427
LOC104916923	2	2	3	2	2	3	uncharacterized LOC104916923
KCNJ4	1	4	4	2	2	3	potassium inwardly-rectifying channel, subfamily J, member 3
LOC104913016	3	9	7	4	2	3	uncharacterized LOC104913016

LOC104917343	6	3	2	4	1	3	tetratricopeptide repeat protein 24-like
LOC100539073	0	5	1	2	1	3	ganglioside-induced differentiation-associated protein 1-like 1
LOC104911620	9	3	10	2	12	3	uncharacterized LOC104911620
LOC104912415	6	6	4	4	3	3	SH3-containing GRB2-like protein 3-interacting protein 1
LOC104914678	3	3	3	1	3	3	uncharacterized LOC104914678
LOC100548116	0	1	1	1	2	3	pumilio domain-containing protein KIAA0020-like
LOC104910542	3	2	4	2	1	3	uncharacterized LOC104910542
HPX	2	2	1	1	4	3	heparanase 2 (inactive)
LOC104912881	2	2	2	1	4	3	uncharacterized LOC104912881
C10H1orf228	3	2	3	5	4	3	chromosome 10 open reading frame, human C1orf226
NIPAL2	6	4	4	5	4	3	NIPA-like domain containing 2
PAX5	1	3	1	1	3	3	paired box 5
APOBEC4	2	1	2	3	2	3	apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 4 (putative)
LOC104912559	1	1	1	3	2	3	A-kinase anchor protein SPHKAP-like
PCSK4	3	2	2	1	1	3	proprotein convertase subtilisin/kexin type 4
LOC104912541	1	2	3	1	1	3	uncharacterized LOC104912541
LOC104914738	0	1	0	1	1	3	uncharacterized LOC104914738
LOC100543367	5	4	5	4	1	3	feather keratin 1-like
LOC104910829	3	2	1	3	5	3	uncharacterized LOC104910829
LOC104910746	1	2	3	1	4	3	alcohol dehydrogenase 1-like
LOC104911810	1	2	3	1	4	3	contactin-associated protein-like 5
LOC104914428	2	5	2	4	4	3	uncharacterized LOC104914428
LOC104912536	0	2	1	0	1	3	uncharacterized LOC104912536
LOC104916470	5	5	2	6	12	3	potassium channel subfamily K member 1-like
LOC104913023	12	5	11	10	6	3	uncharacterized LOC104913023
SOWAHB	3	3	1	3	5	3	sosondowah ankyrin repeat domain family member B
LOC104913820	4	5	3	3	5	3	uncharacterized LOC104913820
LOC104914305	7	2	3	2	4	3	uncharacterized LOC104914305
LOC100541044	1	2	3	6	1	3	25-hydroxycholesterol 7-alpha-hydroxylase
LOC104909474	2	2	1	1	1	3	uncharacterized LOC104909474
LOC104911365	2	2	2	3	1	3	uncharacterized LOC104911365
LOC104913255	1	2	2	4	1	3	uncharacterized LOC104913255
LOC100542428	2	1	1	0	1	3	myotubularin-related protein 13-like
LOC104910541	0	0	2	1	0	3	uncharacterized LOC104910541
DUOXA2	0	1	1	1	0	3	dual oxidase maturation factor 1
PRLH	7	6	7	4	6	3	prolactin releasing hormone
SV2B	2	2	3	4	6	3	synaptic vesicle glycoprotein 2B
LOC104916132	5	7	4	4	3	3	uncharacterized LOC104916132
LOC100541770	4	3	6	3	3	3	olfactory receptor 1052-like
LOC104910931	2	1	2	3	2	3	uncharacterized LOC104910931
LOC104911182	4	3	4	4	2	3	uncharacterized LOC104911182
LOC100541906	5	3	1	4	7	2	tubulin epsilon chain
PRL	4	2	6	2	6	2	prolactin
LOC104912263	8	4	2	4	5	2	uncharacterized LOC104912263
LOC100548732	4	2	1	2	4	2	cystine/glutamate transporter-like
NEFM	3	1	2	2	3	2	neurofilament, medium polypeptide
FOXN4	2	6	4	5	2	2	forkhead box N3
ZP2	1	2	1	1	1	2	zona pellucida glycoprotein 2 (sperm receptor)
LOC100543444	2	0	1	1	1	2	histone H2B 5
LOC104910107	2	3	1	3	1	2	N-acetyllactosaminide beta-1,6-N-acetylglucosaminyl-transferase, isoform C pseudogene
LOC104909766	0	3	2	3	1	2	uncharacterized LOC104909766
LOC104909596	3	2	2	2	1	2	fork head domain-containing protein FD5-like
FAM83B	2	2	1	1	1	2	family with sequence similarity 83, member A
LOC104909650	2	2	2	2	0	2	kinesin-like protein KIF6
TRIM29	3	6	5	6	4	2	tripartite motif containing 29
LOC104913410	0	2	1	1	3	2	uncharacterized LOC104913410
LOC104909845	1	4	3	6	2	2	transmembrane protein FLJ37396
LOC100544231	2	2	2	2	2	2	sex comb on midleg-like protein 4
LOC104913313	1	2	2	1	1	2	uncharacterized LOC104913313
LOC104917522	5	3	3	8	10	2	epithelial-stromal interaction protein 1-like
LOC104915938	3	5	4	7	5	2	proto-oncogene Mas-like
GABRB3	3	4	3	3	2	2	gamma-aminobutyric acid (GABA) A receptor, beta 2
ZNF804A	3	3	1	2	2	2	zinc finger protein 804A
LOC104913593	0	0	0	1	0	2	uncharacterized LOC104913593
LOC100550777	6	3	5	2	5	2	bone morphogenetic protein 8A
LOC104913683	4	4	5	3	4	2	uncharacterized LOC104913683
SV2C	3	3	2	6	4	2	synaptic vesicle glycoprotein 2C
LOC104909356	4	6	6	4	3	2	poly [ADP-ribose] polymerase 8-like
RUNX2	0	4	2	2	3	2	runt-related transcription factor 2
LOC104910929	2	1	3	1	3	2	uncharacterized LOC104910929
LOC104911793	3	2	1	2	1	2	uncharacterized LOC104911793
LOC104911066	0	1	1	1	0	2	uncharacterized LOC104911066
FRMPD1	5	1	4	1	4	2	FERM domain containing 7
FHAD1	1	3	2	2	3	2	fumarate hydratase
SYNDIG1	1	6	2	5	2	2	synapse differentiation inducing 1
RALLYL	3	2	4	4	2	2	RALLY RNA binding protein-like

LOC104917238	3	3	2	4	2	2	uncharacterized LOC104917238
LOC104916803	2	3	3	2	1	2	V-type proton ATPase subunit G 1-like
LOC104911658	3	3	5	2	1	2	uncharacterized LOC104911658
LOC100546179	2	3	1	2	1	2	POU domain, class 4, transcription factor 1-like
NEK5	4	2	6	1	6	2	NIMA-related kinase 5
LOC104917424	3	5	5	7	5	2	integrin beta-like protein 1
TRPC7							
	4	3	2	2	5	2	transient receptor potential cation channel, subfamily C, member 7
LOC104912666	7	3	3	3	3	2	uncharacterized LOC104912666
LOC104917338	3	2	4	3	3	2	spectrin beta chain, non-erythrocytic 1-like
NDST4							
	1	4	3	4	2	2	N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 4
LOC104917001	10	4	3	4	2	2	uncharacterized LOC104917001
LOC104913999	3	4	4	2	2	2	uncharacterized LOC104913999
HPSE2	8	4	9	5	1	2	heparanase
CKK	1	1	3	1	1	2	coiled-coil domain containing 97
C10H1orf210	1	1	2	1	0	2	chromosome 10 open reading frame, human C1orf21
LOC104912172	0	1	0	0	0	2	uncharacterized LOC104912172
LOC104913265	3	0	1	0	0	2	uncharacterized LOC104913265
LOC104913201	1	2	1	3	1	2	uncharacterized LOC104913201
CIDEA	15	15	2	15	6	2	cell death-inducing DFFA-like effector a
LOC104912672	1	2	4	1	5	2	uncharacterized LOC104912672
NRG2	2	2	2	2	4	2	neuregulin 2
LOC104912865	3	2	5	3	3	2	uncharacterized LOC104912865
LOC100543904	2	3	3	2	3	2	scale keratin-like
LOC104912860	4	3	1	3	2	2	uncharacterized LOC104912860
RAB39A	5	3	4	2	2	2	RAB39A, member RAS oncogene family
LRGUK	1	2	2	3	2	2	leucine-rich repeats and guanylate kinase domain containing
LOC104910367	2	2	3	2	1	2	uncharacterized protein C8orf34 homolog
LOC104912846	1	1	2	1	1	2	uncharacterized LOC104912846
LOC100539435	2	2	5	3	1	2	chromodomain-helicase-DNA-binding protein 1-like
ABCB4							
	0	4	2	4	1	2	ATP-binding cassette, sub-family B (MDR/TAP), member 4
LOC104915471	0	1	0	2	0	2	uncharacterized LOC104915471
LOC104913591	4	3	8	2	6	2	uncharacterized LOC104913591
LOC104916763	7	4	2	2	2	2	G2/M phase-specific E3 ubiquitin-protein ligase-like
LOC100543590	7	4	5	5	1	2	60S ribosomal protein L17
LOC104913301	3	3	1	3	1	2	uncharacterized LOC104913301
LOC104913199	3	2	7	1	3	2	uncharacterized LOC104913199
LOC104912524	5	4	5	4	3	2	uncharacterized LOC104912524
LOC104909789	8	3	7	2	3	2	uncharacterized LOC104909789
LOC104910239	1	0	1	2	2	2	CD226 antigen
LOC104912801	2	2	1	2	2	2	uncharacterized LOC104912801
LOC104917459	1	3	5	3	2	2	uncharacterized LOC104917459
LOC104916295	4	2	3	3	1	2	glycine-rich cell wall structural protein 1.0-like
TRHR	0	3	0	7	1	2	thyrotropin-releasing hormone receptor
LOC104911593	1	2	3	5	1	2	uncharacterized LOC104911593
STYXL1	1	3	3	1	1	2	serine/threonine/tyrosine interacting-like 1
LOC104915547	3	2	4	2	1	2	uncharacterized LOC104915547
LOC100544544	1	2	0	1	1	2	glyoxylate reductase/hydroxypyruvate reductase-like
LOC100544815	0	2	1	1	1	2	16 kDa beta-galactoside-binding lectin
LOC104910225	3	2	1	2	0	2	F-box only protein 15-like
LOC100543544	6	5	11	11	34	2	transmembrane protein 189-like
EXOC3L4	2	4	2	3	4	2	exocyst complex component 3-like 1
KCNJ3							
	6	3	5	5	6	2	potassium inwardly-rectifying channel, subfamily J, member 2
LOC104912955	4	4	5	5	3	2	uncharacterized LOC104912955
LOC104915034	1	1	2	2	3	2	centlein-like
NKAIN1	1	4	2	2	2	2	Na ⁺ /K ⁺ transporting ATPase interacting 1
LOC104914170							
	2	2	2	3	2	2	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase eta-2-like
LOC104913574	8	2	3	2	2	2	uncharacterized LOC104913574
MAB21L3	5	3	2	3	2	2	mab-21-like 3 (C. elegans)
LOC104916785	3	1	3	1	2	2	homeobox protein GHOX-7
LOC104910986	4	5	9	4	2	2	uncharacterized LOC104910986
LOC104915213	1	3	3	3	2	2	uncharacterized LOC104915213
LOC100544848	1	4	2	2	2	2	transducin-like enhancer protein 4
LOC104909553	1	1	1	2	2	2	carbohydrate sulfotransferase 8-like
LOC104910927	2	2	1	2	1	2	uncharacterized LOC104910927
LOC104915638	2	2	1	1	1	2	putative uncharacterized protein ENSP00000383309
YJEFN3	1	8	1	2	1	2	YjeF N-terminal domain containing 3
KCNMB4							
	7	5	3	7	7	2	potassium large conductance calcium-activated channel, subfamily M, beta member 2
VRTN	1	0	1	2	6	2	vertebrae development associated
LOC100543242	4	6	3	5	3	2	interstitial collagenase-like
LOC104913323	8	4	4	5	5	2	folliculin-related protein 4-like
LOC104912327	12	5	7	4	5	2	transmembrane protein 121
ARR3	2	6	6	5	5	2	arrestin 3, retinal (X-arrestin)
LOC104911895	1	3	4	2	5	2	glutamate receptor ionotropic, delta-1-like

INHBB	1	3	1	1	2	2	inhibin, beta A
EPCAM	2	3	3	4	1	2	enhancer of polycomb homolog 2 (Drosophila)
LOC104909925	1	1	1	2	1	2	uncharacterized LOC104909925
LOC104917279	2	0	0	0	1	2	fibrinogen-like protein A
LOC104917229	0	1	0	1	0	2	zinc finger protein 501-like
LOC104910846	1	1	1	1	0	2	janus kinase and microtubule-interacting protein 1
SEZ6L	5	8	6	4	8	2	seizure related 6 homolog (mouse)-like
LOC104911922	7	5	10	2	6	2	uncharacterized LOC104911922
LOC100542972	4	4	5	3	4	2	annexin A1 isoform p37-like
APC2	4	4	1	3	4	2	adenomatosis polyposis coli 2
LOC104915289	4	3	1	4	3	2	uncharacterized LOC104915289
SPATA4	10	4	8	1	3	2	spermatogenesis associated 4
LOC100549029	2	2	2	2	2	2	protein phosphatase 1 regulatory subunit 3C-B-like
WDR78	5	3	4	2	2	2	WD repeat domain 78
LOC104914581	3	3	4	4	2	2	uncharacterized LOC104914581
MRAP	3	4	3	2	2	2	melanocortin 2 receptor accessory protein
LOC100545720	0	1	2	2	1	2	uncharacterized LOC100545720
SOX2	2	2	3	1	1	2	SRY (sex determining region Y)-box 2
SERPINB12	0	1	1	0	1	2	serpin peptidase inhibitor, clade B (ovalbumin), member 12
LOC100547860	0	9	1	1	0	2	claudin-16-like
KCNGB4	5	6	10	5	8	2	potassium voltage-gated channel, subfamily G, member 3
RASEF	2	4	6	4	4	2	RAS and EF-hand domain containing
MAS1	4	7	7	7	4	2	MAS1 proto-oncogene, G protein-coupled receptor
LOC104912051							phosphatidylinositol 4-phosphate 3-kinase C2 domain-containing subunit gamma-like
	4	3	3	3	3	2	
LOC104914733							
	1	2	6	2	3	2	maestro heat-like repeat-containing protein family member 1
UNC5D	3	3	1	2	2	2	unc-5 homolog D (C. elegans)
LOC104910550	8	3	5	3	2	2	uncharacterized LOC104910550
SAG	2	1	2	0	1	2	S-antigen; retina and pineal gland (arrestin)
LOC100545806	1	2	0	1	1	2	lysosomal amino acid transporter 1 homolog
HMX3	2	2	1	1	1	2	H6 family homeobox 2
LOC104917340	4	5	3	7	8	2	uncharacterized protein MGC39606-like
RGS11	9	4	11	6	8	2	regulator of G-protein signaling like 1
LOC104916649	2	4	1	2	4	2	histone H4
LOC104911175	0	2	2	2	2	2	uncharacterized LOC104911175
LINGO3	2	1	2	0	1	2	leucine rich repeat and Ig domain containing 2
CFAP45	2	6	3	3	6	2	cilia and flagella associated protein 44
GRAP	6	4	5	5	5	2	GRAM domain containing 2
LOC104911905	2	2	2	2	4	2	uncharacterized LOC104911905
LOC104911956	9	4	4	3	4	2	uncharacterized LOC104911956
LOC104913539	4	3	4	3	4	2	uncharacterized LOC104913539
C17H1orf85	3	1	2	1	3	2	chromosome 16 open reading frame, human C8orf33
GOLPH3L	6	5	4	3	3	2	golgi phosphoprotein 3 (coat-protein)
CD40LG	3	3	3	2	2	2	CD40 molecule, TNF receptor superfamily member 5
LOC104911777	3	3	3	3	2	2	rap guanine nucleotide exchange factor 4-like
LOC104916161	4	2	5	9	2	2	uncharacterized LOC104916161
LOC104913443	7	4	3	3	2	2	uncharacterized LOC104913443
IQCD	3	3	3	2	2	2	IQ motif containing C
LOC104912877	2	2	3	2	2	2	uncharacterized LOC104912877
CSH1orf132	5	5	6	3	2	2	chromosome 5 open reading frame, human C14orf105
LOC104912464	1	1	1	1	2	2	phosphatidylinositol 3-kinase regulatory subunit alpha-like
LOC104911246	0	2	1	1	1	2	uncharacterized LOC104911246
PFN3	0	0	2	1	1	2	profilin 3
LOC104916223	5	2	1	2	6	2	glucosylceramidase-like
LOC100540438	6	3	3	2	5	2	estradiol 17-beta-dehydrogenase 11-like
NOXRED1	4	2	2	1	5	2	NADP-dependent oxidoreductase domain containing 1
BMP15	7	3	5	4	4	2	bone morphogenetic protein 15
GRM3	5	4	9	4	3	2	glutamate receptor, metabotropic 2
LOC104916537	2	1	3	3	2	2	microtubule-associated protein 6 homolog
LOC104917588	1	7	4	2	2	2	collagenase 3-like
ANKDD1B	1	1	2	2	2	2	ankyrin repeat and death domain containing 1B
LOC104912426	2	1	2	1	1	2	uncharacterized LOC104912426
LOC104914079	1	2	1	1	1	2	uncharacterized LOC104914079
LOC104916662	0	2	0	2	0	2	uncharacterized LOC104916662
LOC104911518	0	0	0	0	0	2	PHD finger protein 7-like
GALR3	2	9	1	7	11	2	galanin receptor 2
SEBOX	6	2	4	1	5	2	SEBOX homeobox
UBASH3A	5	2	2	3	4	2	ubiquitin associated and SH3 domain containing A
LOC100543277	2	1	1	4	4	2	selenium-binding protein 1-like
RTN4R	5	4	6	4	2	2	reticulon 4 receptor
KLHL32	3	2	2	1	2	2	kelch-like family member 31
GYG2	1	2	2	3	2	2	glycogenin 1
MAEL	4	3	2	4	1	2	maelstrom spermatogenic transposon silencer
LOC104910498	1	1	2	1	1	2	uncharacterized LOC104910498
PAH	1	3	4	2	5	2	phenylalanine hydroxylase
LOC100542876	9	3	11	2	4	2	uncharacterized LOC100542876
LOC104912094	4	1	1	2	3	2	uncharacterized LOC104912094
LOC104917132	9	3	3	2	2	2	MARVEL domain-containing protein 3-like

TSPAN10	4	1	1	2	2	2	tetraspanin 10
NKX2-3	3	3	1	1	1	2	NK2 homeobox 3
LOC104913841	2	1	1	0	1	2	antigen WC1.1-like
LOC104911655	3	3	2	2	1	2	uncharacterized LOC104911655
DEGS2	2	1	3	1	0	2	delta(4)-desaturase, sphingolipid 1
LOC100547253	4	4	2	6	4	2	hemoglobin subunit beta
CLDN3	3	3	3	2	4	2	claudin 25
LOC104910390	6	2	2	2	3	2	uncharacterized LOC104910390
LOC104911592	1	2	4	2	2	2	uncharacterized LOC104911592
LOC104916416							
	3	3	3	1	4	2	dual 3',5'-cyclic-AMP and -GMP phosphodiesterase 11A pseudogene
LOC104912906	3	2	3	2	3	2	ephrin type-A receptor 1-like
LOC104910128	4	3	1	1	3	2	uncharacterized LOC104910128
LOC104917465	3	7	3	3	2	2	uncharacterized LOC104917465
SPAM1							sperm adhesion molecule 1 (PH-20 hyaluronidase, zona pellucida binding)
	2	3	3	1	2	2	
LOC104910912	3	5	4	4	2	2	sodium bicarbonate transporter-like protein 11
FAH	3	3	2	1	2	2	Fas associated factor family member 2
NMU	13	2	4	1	2	2	neuromedin U
LOC104914142	4	1	5	0	2	2	uncharacterized LOC104914142
LOC100544232	2	1	1	1	1	2	coiled-coil domain-containing protein 178-like
TMEM61	5	3	3	3	1	2	transmembrane protein 61
LOC104909300	8	0	1	1	8	2	RANBP2-like and GRIP domain-containing protein 1
FOXF1	4	3	2	2	4	2	forkhead box E3
LOC104910059	6	2	3	2	1	2	fibrocystin-like
GPR97	3	3	5	2	6	2	G protein-coupled receptor 89B
LOC104912145	3	3	6	4	5	2	protein bicaudal D homolog 1-like
LOC104910726	11	6	4	6	4	2	uncharacterized LOC104910726
ATP6V1G3	3	1	2	2	2	2	ATPase, H+ transporting, lysosomal 13kDa, V1 subunit G3
FAM3B	3	3	2	3	2	2	family with sequence similarity 35, member A
LOC100541445	3	2	4	3	2	2	histone H2B 1/2/3/4/6
LOC100538963	3	4	3	4	2	2	dihydropyrimidinase-related protein 2
HPD	2	4	1	3	2	2	hippocalcin like 4
LOC104913808	5	3	1	1	2	2	uncharacterized LOC104913808
LOC104912398	1	3	2	2	2	2	uncharacterized LOC104912398
LOC104914541	5	2	1	3	2	2	probable E3 ubiquitin-protein ligase makorin-1
EPS8L3	0	1	0	1	1	2	EPS8-like 2
LOC104911469	1	3	2	3	1	2	uncharacterized protein C7orf63 homolog
LOC104911710	5	5	6	2	1	2	uncharacterized LOC104911710
LOC104913330	2	2	1	1	1	2	putative E3 ubiquitin-protein ligase SH3RF2
FETUB	4	3	1	2	1	2	FES proto-oncogene, tyrosine kinase
LOC104909719	1	1	1	3	1	2	uncharacterized LOC104909719
LOC104911772	3	1	1	1	1	2	sodium channel protein type 2 subunit alpha-like
LOC100545300	1	1	2	2	0	2	dynein heavy chain 9, axonemal
SLC32A1							
	9	2	3	8	7	2	solute carrier family 32 (GABA vesicular transporter), member 1
LOC104915461	4	2	2	3	4	2	uncharacterized LOC104915461
CCDC65	1	1	3	2	3	2	coiled-coil domain containing 64
LOC104916248	2	4	2	2	2	2	uncharacterized LOC104916248
LOC104915923	7	5	5	4	2	2	uncharacterized LOC104915923
GPR142	3	3	2	4	2	2	G protein-coupled receptor 141
LOC104909764	2	1	1	1	1	2	uncharacterized LOC104909764
LOC104915409	3	4	3	4	0	2	epiplakin-like
LOC104916667	7	6	6	1	3	2	outer dense fiber protein 3-like
LOC104916445	0	3	3	2	2	2	POU domain, class 3, transcription factor 3
FBXL16	4	1	1	1	0	2	F-box and leucine-rich repeat protein 15
LOC104910306							
	0	1	1	0	0	2	maestro heat-like repeat-containing protein family member 2B
LOC104910871	4	6	6	4	6	2	homeobox protein HMX2-like
LOC100547885	4	5	5	3	4	2	SWI/SNF complex subunit SMARCC1-like
LOC104912290	7	3	4	4	4	2	uncharacterized LOC104912290
LOC100549720	3	3	4	3	1	2	dynein heavy chain 5, axonemal-like
SLC51B	3	5	3	2	1	2	solute carrier family 51, beta subunit
LOC104915127	2	2	2	1	1	2	uncharacterized LOC104915127
LOC100544973	1	1	3	1	1	2	ADAMTS-like protein 2
TLX2	3	3	4	2	2	2	T-cell leukemia homeobox 2
LOC100539227	3	2	3	1	1	2	trinucleotide repeat-containing gene 18 protein-like
LOC104910228	1	2	1	2	1	2	uncharacterized protein C18orf63-like
LOC100539680	2	1	1	0	0	2	serine dehydratase-like
LOC104917074	14	3	6	1	8	2	uncharacterized LOC104917074
LOC104916648	13	1	6	3	8	2	histone H2B-like
LOC100545583	7	7	6	6	4	2	signal transducing adapter molecule 1
LOC104910342	5	6	3	3	2	2	lipoxigenase homology domain-containing protein 1-like
LOC104915762	0	2	0	3	2	2	uncharacterized LOC104915762
SLC45A2	10	2	10	3	6	2	solute carrier family 45, member 2
LOC104916835	1	2	1	2	2	2	sterile alpha motif domain-containing protein 14-like
LOC100547801	2	8	2	7	1	2	cytochrome P450 2J2-like
FAM26D	2	2	3	1	1	2	family with sequence similarity 228, member B
LOC104912410	0	2	2	1	0	2	uncharacterized LOC104912410

KCNK2	3	2	2	3	4	2	potassium channel, subfamily K, member 18
LOC100544290	3	2	5	2	4	2	von Willebrand factor D and EGF domain-containing protein-like
LOC104910181	3	5	3	4	3	2	uncharacterized LOC104910181
STRA8	4	2	2	2	2	2	stimulated by retinoic acid 8
LOC104914068	1	1	2	0	2	2	uncharacterized LOC104914068
CABP4	1	2	0	1	1	2	calcium binding protein 2
LOC104910696	1	1	0	1	1	2	glutamate receptor ionotropic, delta-2-like
LOC104909753	2	1	1	4	6	2	uncharacterized LOC104909753
LOC100547657	3	5	3	4	5	2	digestive cysteine proteinase 1-like
LOC104910742	3	4	2	2	5	2	uncharacterized LOC104910742
LOC104913149	3	1	1	1	4	2	uncharacterized LOC104913149
NWD2	5	6	4	3	4	2	NACHT and WD repeat domain containing 2
ILDR1	2	5	3	2	4	2	interleukin 8
LOC104912049	1	2	2	5	4	2	synaptic vesicular amine transporter-like
LOC104911382	3	1	1	1	3	2	uncharacterized LOC104911382
LOC104916564	1	1	1	2	2	2	uncharacterized LOC104916564
LOC104915740	1	5	3	2	2	2	putative N-acetyltransferase 8B
LOC100545776	2	1	1	2	2	2	collagen alpha-1(VII) chain-like
CCDC60	0	5	1	3	1	2	coiled-coil domain containing 6
LOC104913268	2	2	3	2	1	2	uncharacterized LOC104913268
LOC100545769	1	2	2	1	1	2	membrane primary amine oxidase-like
LOC104910378	1	1	2	1	1	2	uncharacterized LOC104910378
LOC104910611	3	4	3	2	4	2	uncharacterized LOC104910611
LOC104916683	4	3	2	4	2	2	uncharacterized LOC104916683
LOC104912968	4	4	2	2	2	2	uncharacterized LOC104912968
LOC104911221	2	1	3	3	2	2	uncharacterized LOC104911221
UNC119	5	4	4	3	1	2	unc-119 homolog (C. elegans)
LOC104910321	2	2	3	1	1	2	uncharacterized LOC104910321
LOC104915223	4	1	2	1	1	2	uncharacterized LOC104915223
LOC104912607	6	2	3	2	1	2	uncharacterized LOC104912607
LOC104914157	3	2	5	2	1	2	uncharacterized LOC104914157
LOC104911965	1	1	1	2	1	2	PH and SEC7 domain-containing protein 1-like
LOC104912313	2	6	4	2	0	2	uncharacterized LOC104912313
LOC104914812	3	1	3	2	0	2	uncharacterized LOC104914812
LOC104916387	6	3	4	5	7	2	uncharacterized LOC104916387
LOC104912768	5	2	7	3	6	2	uncharacterized LOC104912768
LOC104917323	3	5	4	5	4	2	kinesin-like protein KIF13A
LOC100544588	5	3	3	2	4	2	WASH complex subunit CCDC53-like
LOC104910904	5	4	4	2	3	2	uncharacterized LOC104910904
RNF17	3	2	2	2	2	2	ring finger protein 17
LOC104910516	1	2	1	3	2	2	uncharacterized LOC104910516
LOC104909893	1	1	2	1	2	2	uncharacterized LOC104909893
SPP2	3	1	2	1	2	2	secreted phosphoprotein 2, 24kDa
SPATA22	1	1	2	1	1	2	spermatogenesis associated 22
HNF4G	0	1	4	1	1	2	hepatocyte nuclear factor 4, alpha
GRHL2	3	3	3	2	1	2	gremlin 2, DAN family BMP antagonist
OGDHL	2	3	2	2	1	2	oxoglutarate dehydrogenase-like
LOC104914717	1	1	2	0	1	2	uncharacterized LOC104914717
LOC104911735	3	1	3	2	1	2	rap guanine nucleotide exchange factor 4-like
KCTD4	1	1	2	0	1	2	potassium channel tetramerization domain containing 3
SLC22A7	1	1	1	2	0	2	solute carrier family 22 (organic anion transporter), member 7
LOC104912630	0	1	1	1	0	2	collagen alpha-3(IV) chain-like
LOC104910615	2	1	1	0	0	2	uncharacterized LOC104910615
SPAG16	3	5	8	4	9	2	sperm associated antigen 16
LOC104909874	2	5	2	2	7	2	single-minded homolog 1-like
SCNN1D	4	1	3	0	6	2	sodium channel, non-voltage-gated 1, delta subunit
LOC104912185	2	2	1	2	6	2	uncharacterized LOC104912185
LOC104912953	6	5	3	6	5	2	adenylate cyclase type 7-like
LOC100538965	9	6	7	3	5	2	potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 4-like
TMEM151B	9	6	4	6	4	2	transmembrane protein 151B
LOC104916013	3	2	2	1	3	2	fibronectin type III domain-containing protein 9-like
MACC1	2	3	2	3	3	2	metastasis associated in colon cancer 1
KRT18	2	4	2	1	2	2	KRR1, small subunit (SSU) processome component, homolog (yeast)
LOC104912692	2	3	1	1	2	2	uncharacterized LOC104912692
LOC104912638	1	1	2	3	1	2	calsyntenin-2-like
CAMKV	1	3	2	2	1	2	calmodulin-lysine N-methyltransferase
LOC104913197	0	1	0	1	1	2	uncharacterized LOC104913197
KCNJ16	2	3	1	4	1	2	potassium inwardly-rectifying channel, subfamily J, member 15
LOC104911791	1	1	2	1	1	2	uncharacterized LOC104911791
LOC104912986	0	1	1	2	1	2	BTB/POZ domain-containing protein KCTD19-like
LOC104909531	1	0	2	1	1	2	uncharacterized LOC104909531
LOC104915046	1	1	2	1	1	2	interferon kappa-like
SLC6A18	1	1	1	0	1	2	solute carrier family 6 (neutral amino acid transporter), member 18

LOC104915580	1	0	1	0	1	2	polycomb group ring finger 2
IAPP	0	2	1	1	0	2	isoamyl acetate-hydrolyzing esterase 1 homolog (S. cerevisiae)
LOC104916245	0	2	1	1	0	2	uncharacterized LOC104916245
LOC100550551	14	7	8	10	11	2	vitellogenin-2-like
C2H2orf71	7	2	2	2	5	2	chromosome 2 open reading frame, human C2orf70
LOC104912386	2	2	5	2	4	2	axonemal dynein light chain domain-containing protein 1-like
FOXL2	4	2	1	1	3	2	forkhead box L1
LOC104916638	0	1	0	2	1	2	putative uncharacterized protein C6orf183
LOC104911818	0	4	2	2	1	2	uncharacterized LOC104911818
LOC100539904	0	1	2	1	1	2	lysine-specific demethylase 6A
FOXK1	0	1	0	0	1	2	forkhead box K2
LOC104909696	1	6	1	2	0	2	uncharacterized LOC104909696
LOC104910463	1	0	0	0	0	2	secreted Ly-6/uPAR-related protein 1-like
LOC104915705	0	0	0	0	0	2	outer dense fiber protein 3-like
LOC100542660	4	6	4	9	18	2	BCL-6 corepressor-like protein 1
GDPD2	5	6	5	6	15	2	glycerophosphodiester phosphodiesterase domain containing 1
LOC104910074	3	6	7	6	8	2	uncharacterized LOC104910074
LOC100545558	4	5	6	5	7	2	WD and tetratricopeptide repeats protein 1
LOC104914239	3	3	3	2	4	2	disintegrin and metalloproteinase domain-containing protein 32-like
LOC104916114	3	2	7	3	4	2	interleukin-5 receptor subunit alpha-like
LOC104914395	5	3	4	4	3	2	synaptic vesicle glycoprotein 2A-like
LOC100544866	3	2	1	1	3	2	keratin, type II cytoskeletal 6A-like
ERC2	5	5	7	3	3	2	v-erb-b2 avian erythroblastic leukemia viral oncogene homolog 4
LOC104913046	3	3	1	2	3	2	A disintegrin and metalloproteinase with thrombospondin motifs 18-like
LOC104915918	0	1	1	1	2	2	uncharacterized LOC104915918
LOC104913165	2	3	3	4	2	2	uncharacterized LOC104913165
LOC104915235	4	1	5	2	2	2	uncharacterized LOC104915235
REEP6	1	2	2	2	2	2	receptor accessory protein 6
LOC100548817	1	3	0	1	2	2	ubiquitin carboxyl-terminal hydrolase 12-like
GRID2IP	1	1	0	0	2	2	glutamate receptor, ionotropic, AMPA 3
GAS2L2	2	4	2	2	2	2	growth arrest-specific 2 like 1
NRN1	4	2	2	1	2	2	neuritin 1
LOC100545280	1	1	0	0	1	2	yrdC domain-containing protein, mitochondrial-like
LOC104911259	1	1	0	0	1	2	uncharacterized LOC104911259
LOC104916697	3	3	3	4	1	2	macrophage mannose receptor 1-like
LRRTM3	2	2	3	1	1	2	leucine rich repeat transmembrane neuronal 3
LOC104917606	2	3	0	2	1	2	uncharacterized LOC104917606
LOC104910497	2	1	1	0	1	2	uncharacterized LOC104910497
TM4SF19	2	1	0	0	1	2	transmembrane 4 L six family member 19
C5H14orf39	1	1	1	0	1	2	chromosome 5 open reading frame, human C14orf37
VWC2	2	1	3	1	0	2	von Willebrand factor C domain containing 2
LOC100550226	0	1	0	1	0	2	HLA class II histocompatibility antigen, DM beta chain-like
LOC104915830	3	4	4	4	4	2	chromosome unknown open reading frame, human C1orf106
LOC104910401	5	4	5	3	4	2	uncharacterized LOC104910401
LOC100539037	2	4	3	1	4	2	cholesterol 7-alpha-monooxygenase
STEAP4	8	2	6	18	4	2	STEAP family member 4
LOC104910701	2	6	4	1	4	2	uncharacterized LOC104910701
LOC100543179	3	2	5	3	4	2	kinesin-like protein KIF1A
OLAH	5	3	3	2	3	2	oleoyl-ACP hydrolase
EOMES	3	1	3	2	3	2	EGF domain-specific O-linked N-acetylglucosamine (GlcNAc) transferase
LOC104915870	0	1	3	2	2	2	uncharacterized LOC104915870
SLC7A14	1	2	1	1	2	2	solute carrier family 7, member 14
FBXO41	1	3	1	3	2	2	F-box protein 40
LOC104909507	1	1	1	1	1	2	uncharacterized LOC104909507
LOC104916883	0	1	1	0	0	2	maestro heat-like repeat-containing protein family member 2A
TMPRSS7	6	9	3	13	26	2	transmembrane protease, serine 7
TNFSF11	5	10	2	3	5	2	tumor necrosis factor (ligand) superfamily, member 11
TD02	2	4	3	4	4	2	tryptophan 2,3-dioxygenase
TMSB4X	2	3	3	2	3	2	thymosin beta 4, X-linked
LOC104911970	3	2	2	0	3	2	kinesin-like protein KIF20B
LOC104910133	1	3	2	4	3	2	uncharacterized LOC104910133
LOC104910831	1	3	2	5	2	2	uncharacterized LOC104910831
GDF2	0	2	4	2	2	2	growth differentiation factor 15
SLC6A20	1	1	0	0	2	2	solute carrier family 6 (proline IMINO transporter), member 20
LOC104916424	1	1	2	2	2	2	microtubule-actin cross-linking factor 1-like
LOC104909325	3	2	2	4	2	2	low-density lipoprotein receptor-related protein 1B-like
LOC104911659	0	2	3	2	1	2	uncharacterized LOC104911659
LOC104911958	0	0	2	1	1	2	beta-microseminoprotein-like
LOC104911672	1	2	0	0	1	2	uncharacterized LOC104911672
FAM81A	2	1	2	3	0	2	family with sequence similarity 78, member B

SCNN1B	1	4	1	2	0	2	sodium channel, non-voltage-gated 1, beta subunit
TM4SF4	1	2	2	1	0	2	transmembrane 4 L six family member 4
LOC104914834	2	0	0	1	0	2	uncharacterized LOC104914834
LOC100545481	1	1	1	1	0	2	keratin, type II cytoskeletal cochlear-like
LOC104911169	1	0	1	1	0	2	uncharacterized LOC104911169
LOC104917381	0	1	0	1	0	2	olfactory receptor 14C36-like
LOC104911753	1	0	0	0	0	2	uncharacterized LOC104911753
LOC100544311	1	0	0	0	0	2	protein HIRA
LOC104916538	12	4	11	7	9	2	class I histocompatibility antigen, F10 alpha chain pseudogene
LOC104916795	8	14	9	8	9	2	maestro heat-like repeat-containing protein family member 2B
LOC104915635	10	3	7	5	9	2	hemoglobin subunit alpha-D-like
LOC100541147	6	6	2	5	8	2	vasotocin-neurophysin VT
CLDN2	12	7	6	3	6	2	claudin 19
HPCA	2	3	2	1	5	2	heterochromatin protein 1, binding protein 3
SYCE3	4	5	3	2	4	2	synaptonemal complex central element protein 3
OPRL1	1	1	2	1	2	2	opiate receptor-like 1
LOC100545242	4	2	1	6	2	2	nuclear factor erythroid 2-related factor 1 pseudogene
LOC104915878	1	1	3	2	2	2	uncharacterized LOC104915878
SLCSA7	5	4	3	2	2	2	solute carrier family 5 (sodium/choline cotransporter), member 7
GATA5	5	4	2	2	2	2	GATA binding protein 3
LOC104912718	2	4	3	2	2	2	serine palmitoyltransferase small subunit B-like
AQP10	1	0	2	1	1	2	aquaporin 10
LOC100546061	1	2	2	1	1	2	sodium channel protein type 1 subunit alpha-like
CHAT	1	2	1	2	1	2	chromosome alignment maintaining phosphoprotein 1
LOC100547929	3	3	2	3	1	2	uridine-cytidine kinase 1-like 1-like
LOC104911316	1	2	2	1	1	2	uncharacterized LOC104911316
LOC104909715	3	3	1	2	8	2	uncharacterized LOC104909715
LOC104911202	4	4	3	3	8	2	uncharacterized LOC104911202
LOC104916855	3	1	2	1	7	2	COUP transcription factor 2-like
LGR6	5	2	3	3	3	2	leucine-rich repeat containing G protein-coupled receptor 5
ADAD1	1	3	2	3	3	2	adenosine deaminase domain containing 1 (testis-specific)
LOC104912339	1	3	2	2	3	2	uncharacterized LOC104912339
LOC104910341	3	3	3	4	2	2	uncharacterized LOC104910341
CALCA	1	2	3	2	2	2	calbindin 2
DAW1	1	1	2	1	2	2	aspartyl-tRNA synthetase
LOC104910532	3	3	2	1	2	2	uncharacterized LOC104910532
LOC104909541	2	1	1	1	1	2	uncharacterized LOC104909541
LOC104912416	5	3	5	1	1	2	cAMP-specific 3',5'-cyclic phosphodiesterase 4B-like
LOC104915742	0	0	1	0	1	2	transcriptional repressor scratch 1-like
LOC104911353	4	2	1	3	1	2	uncharacterized LOC104911353
GAD2	2	2	3	2	1	2	gamma-aminobutyric acid (GABA) A receptor, rho 3
LOC104916606	1	1	0	1	1	2	polycystic kidney disease and receptor for egg jelly-related protein-like
LOC104911990	3	2	3	3	1	2	uncharacterized LOC104911990
LOC100538453	4	2	5	2	1	2	myosin light chain kinase, smooth muscle-like
LOC104911514	0	0	2	0	1	2	uncharacterized LOC104911514
LOC104912539	1	2	0	3	1	2	uncharacterized LOC104912539
LOC104913148	0	0	1	0	1	2	ovostatin-like
LOC104912937	0	2	1	2	0	2	uncharacterized LOC104912937
LOC104910892	0	1	1	2	0	2	uncharacterized LOC104910892
DLGAP1	2	3	1	2	0	2	discs, large homolog 5 (Drosophila)
XKR6	2	2	3	3	5	2	XK, Kell blood group complex subunit-related family, member 6
LRRD1	2	2	6	4	4	2	leucine-rich repeats and death domain containing 1
LOC104909334	2	3	3	3	4	2	low-density lipoprotein receptor-related protein 1B-like
DLX1	4	4	3	2	3	2	dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex)
LOC104909263	2	3	3	2	3	2	deleted in malignant brain tumors 1 protein-like
LOC100545463	2	1	3	2	2	2	antigen-presenting glycoprotein CD1d-like
LOC104913338	3	3	3	2	2	2	folliculin-related protein 4-like
LOC104915808	3	2	3	2	2	2	synaptic vesicle glycoprotein 2C-like
LOC104915320	0	1	2	1	2	2	uncharacterized LOC104915320
LOC104909841	3	3	2	3	2	2	uncharacterized LOC104909841
LOC104911264	3	7	6	4	2	2	uncharacterized LOC104911264
ROBO3	6	4	2	2	2	2	roundabout, axon guidance receptor, homolog 3 (Drosophila)
VSTM5	4	2	2	2	2	2	V-set and transmembrane domain containing 5
LOC104911875	4	2	2	2	2	2	voltage-dependent L-type calcium channel subunit alpha-1S-like
CACNA1B	4	1	2	1	2	2	cache domain containing 1
LOC104909955	3	3	2	2	1	2	disks large-associated protein 2-like
FOXI1	3	1	1	1	1	2	forkhead box G1
LOC104915529	0	1	1	0	1	2	PHD finger protein 7-like
LOC104910081	0	6	2	3	1	2	uncharacterized LOC104910081
LOC104916777	0	1	0	0	1	2	collagen alpha-1(XV) chain-like
LOC100541086	0	0	0	1	0	2	ybeY metalloprotease

TLDC2	0	1	2	0	0	2	TBC/LysM-associated domain containing 2
LOC104917287	10	3	7	4	7	2	putative ADCY10-like protein
GJA8	2	1	2	1	5	2	gap junction protein, alpha 5, 40kDa
LOC104913221	2	3	5	5	5	2	uncharacterized LOC104913221
SLC6A2							solute carrier family 6 (neurotransmitter transporter, noradrenalin), member 2
	2	4	1	3	4	2	
LOC104915884	5	4	3	3	4	2	uncharacterized LOC104915884
LOC104914502	3	4	2	3	3	2	neurofascin-like
LOC104913985	3	2	4	4	3	2	TOX high mobility group box family member 2-like
SKAP1	2	2	2	3	3	2	src kinase associated phosphoprotein 1
LOC100551159	2	14	5	5	3	2	pulmonary surfactant-associated protein A-like
LOC104910370							
	0	1	3	1	3	2	transient receptor potential cation channel subfamily A member 1-like
TEKT5	0	1	1	1	3	2	tektin 5
LOC100547665							
	2	1	2	0	2	2	leucine-rich repeat and calponin homology domain-containing protein 1
LOC104911431	5	2	2	2	2	2	uncharacterized LOC104911431
ADGB	2	3	3	2	2	2	androglobin
LOC104911615	7	2	4	3	2	2	uncharacterized LOC104911615
LOC104910690	2	3	2	2	2	2	uncharacterized LOC104910690
FNDC9	1	0	1	1	1	2	fibronectin type III domain containing 7
LOC104915833	2	0	1	0	1	2	GTPase IMAP family member 1-like
LOC100542224	0	0	0	0	1	2	olfactory receptor-like protein COR4
CTLA4	3	1	1	1	0	2	CBP80/20-dependent translation initiation factor
LOC104914289	1	0	0	1	0	2	uncharacterized LOC104914289
LOC100541694	1	1	1	0	0	2	integrin-alpha FG-GAP repeat-containing protein 2
LOC104916434	2	5	1	4	6	2	IgGfC-binding protein-like
LOC104910575	9	3	1	15	5	2	interleukin-8-like
RGS17	6	6	7	3	5	2	regulator of G-protein signaling 17
LOC104909729	9	4	6	4	4	2	vacuolar protein 8-like
IL4I1	1	1	5	11	3	2	interleukin 34
LOC104917139	2	2	2	5	3	2	germin-like protein subfamily 2 member 2
LOC104911959	5	11	4	19	3	2	beta-microseminoprotein-like
LOC104914136	7	2	5	4	3	2	uncharacterized LOC104914136
LOC104913946	3	2	0	3	3	2	active breakpoint cluster region-related protein-like
LOC104911181	1	6	2	4	2	2	uncharacterized LOC104911181
LOC104917579	3	2	3	3	2	2	microtubule-associated tumor suppressor candidate 2-like
RFX6	4	3	2	2	2	2	regulatory factor X, 6
LOC104914543	5	4	4	5	2	2	uncharacterized LOC104914543
SLC25A40	2	2	3	0	2	2	solute carrier family 25, member 40
CAPN8	1	4	1	4	2	2	calpain 7
LOC104913392	2	1	2	1	2	2	interleukin-9 receptor-like
LOC100544367	1	2	2	0	1	2	tRNA-dihydrouridine(16/17) synthase [NAD(P)(+)]-like
LOC104911595	1	1	0	0	1	2	uncharacterized LOC104911595
LOC104913200	1	1	1	2	1	2	uncharacterized LOC104913200
LOC104911616	0	1	1	0	1	2	uncharacterized LOC104911616
ARL14EPL	6	4	2	5	1	2	ADP-ribosylation factor-like 14 effector protein-like
LOC104912726	2	7	1	4	1	2	uncharacterized LOC104912726
BRINP2							
	3	1	2	1	1	2	bone morphogenetic protein/retinoic acid inducible neural-specific 1
ZNF804B	4	2	3	2	1	2	zinc finger protein 804B
LOC104911437	1	3	4	2	0	2	cubilin-like
LOC104909500	1	1	0	1	0	2	uncharacterized LOC104909500
LOC100543508	5	3	3	1	0	2	uncharacterized protein C2orf54-like
LOC100548275	1	1	1	0	0	2	mitochondrial intermediate peptidase
LOC104912002	5	2	2	5	8	2	uncharacterized LOC104912002
FAM107A	6	4	2	4	4	2	family with sequence similarity 105, member A
LOC104914674	1	0	2	1	2	2	tyrosine-protein kinase ZAP-70-like
SH2D1A	0	3	3	3	1	2	SH2 domain containing 1A
LOC100543921	1	1	2	0	1	2	opsin-5-like
LOC104914023	2	1	2	1	1	2	uncharacterized LOC104914023
LOC104914237	3	1	1	2	1	2	uncharacterized LOC104914237
C26H11orf1	0	0	0	1	1	2	chromosome 25 open reading frame, human C1orf216
LOC104916122	4	2	2	4	1	2	putative solute carrier family 22 member 31
PRRT3	1	9	2	8	4	2	proline-rich transmembrane protein 3
LOC104910339	2	2	4	2	3	2	myosin-6-like
LOC104911900	2	4	5	2	3	2	uncharacterized LOC104911900
LOC104913428	2	1	4	2	3	2	uncharacterized LOC104913428
LOC100544943	1	1	2	3	2	2	olfactory receptor 14C36-like
LOC104913578	5	6	2	3	2	2	uncharacterized LOC104913578
TECRL	1	7	3	3	2	2	trans-2,3-enoyl-CoA reductase-like
LOC104910727	6	3	3	2	2	2	uncharacterized LOC104910727
LOC100540203	1	1	3	1	2	2	beta-galactosidase-1-like protein 2
LOC104914043	3	1	2	1	2	2	uncharacterized LOC104914043
LOC104910741	2	1	2	1	2	2	uncharacterized LOC104910741
LOC100538416	1	3	2	3	2	2	mitogen-activated protein kinase kinase kinase 15-like
CALHM1	0	0	1	0	1	2	caldesmon 1
LOC104914718	3	3	2	3	1	2	uncharacterized LOC104914718
LOC104911947	1	1	0	1	1	2	uncharacterized LOC104911947

LOC104911473	1	1	1	1	1	2	uncharacterized LOC104911473
LOC104910125	4	5	3	4	1	2	uncharacterized LOC104910125
PPAPDC1A							
	2	2	2	1	1	2	phosphatidic acid phosphatase type 2 domain containing 1A
SLC34A2							solute carrier family 34 (type II sodium/phosphate cotransporter),
	2	1	1	1	1	2	member 2
RPRML	3	0	0	1	0	2	reprimo-like
LOC104913738							
	3	1	3	2	4	2	disintegrin and metalloproteinase domain-containing protein 9-like
KCNE1							
	6	3	6	5	4	2	potassium voltage-gated channel, Shaw-related subfamily, member 4
LOC104909624	0	2	1	1	3	2	uncharacterized LOC104909624
LOC104909378	1	2	3	1	3	2	hephaestin-like protein 1
LOC104914475	4	4	3	2	3	2	uncharacterized LOC104914475
GLOD5	2	1	2	2	2	2	glyoxalase domain containing 4
LOC104912704	2	1	2	1	2	2	uncharacterized LOC104912704
LOC104910610	1	1	2	1	2	2	uncharacterized LOC104910610
LOC104915972	0	0	1	0	2	2	AP-1 complex subunit mu-2-like
LOC104915015	2	6	2	4	2	2	uncharacterized LOC104915015
LOC100551438	1	1	2	1	1	2	B-cell differentiation antigen CD72
GPR15	1	0	1	1	1	2	G protein-coupled receptor 149
LOC104916905	1	1	3	0	1	2	uncharacterized LOC104916905
LOC104909379	2	1	2	2	1	2	pannexin-1-like
LOC104911738	4	3	2	2	1	2	mitogen-activated protein kinase kinase kinase MLT-like
LOC104916482	1	2	2	0	1	2	phenylethanolamine N-methyltransferase-like
LOC104911424	1	0	2	1	1	2	uncharacterized LOC104911424
LOC104916903	1	1	1	2	0	2	uncharacterized LOC104916903
CZH9orf84	0	1	1	1	0	2	chromosome Z open reading frame, human C9orf72
IL1RAPL1	6	8	8	5	6	2	interleukin 1 receptor accessory protein
GNG13	2	2	1	2	3	2	guanine nucleotide binding protein (G protein), gamma 12
MPZL3	0	1	1	1	3	2	myelin protein zero-like 3
LOC104916541	1	2	1	0	3	2	catenin delta-2-like
LOC104911574	3	1	3	1	3	2	uncharacterized LOC104911574
LOC100548557	2	2	3	2	2	2	beta-galactoside alpha-2,6-sialyltransferase 1-like
LOC104910600	0	3	2	3	2	2	uncharacterized LOC104910600
LOC104915466	0	1	1	2	2	2	uncharacterized LOC104915466
LOC104912039	2	2	2	1	2	2	uncharacterized LOC104912039
LOC104912576	3	1	1	2	2	2	uncharacterized LOC104912576
LOC104910313	1	11	1	5	2	2	uncharacterized LOC104910313
LOC104913981	2	2	1	1	2	2	E3 ubiquitin-protein ligase Topors-like
LOC104909930	1	1	1	1	2	2	uncharacterized LOC104909930
LOC104916345	1	0	1	3	1	2	P protein-like
RUFY4	3	3	3	2	1	2	RUN and FYVE domain containing 4
LOC104913243	1	1	1	0	1	2	uncharacterized LOC104913243
SLC18A3							
	4	4	3	2	1	2	solute carrier family 18 (vesicular acetylcholine transporter), member 3
NKX2-6	2	0	0	1	1	2	NK2 homeobox 6
LOC104914763	1	0	0	0	1	2	interferon-like
LOC104910092	0	1	2	0	1	2	uncharacterized LOC104910092
LOC104912662	3	1	5	2	0	2	uncharacterized LOC104912662
CDK5R2	1	1	1	0	0	2	cyclin-dependent kinase 5, regulatory subunit 1 (p35)
CCL17	3	5	1	3	5	2	chemokine (C-C motif) ligand 13
LOC104916663	3	1	2	1	4	2	uncharacterized LOC104916663
LOC104912167	8	4	4	4	4	2	uncharacterized LOC104912167
LOC104913627	3	5	2	5	2	2	uncharacterized LOC104913627
LOC104910447	2	1	2	2	2	2	uncharacterized LOC104910447
LOC100546728	0	0	2	1	2	2	cytochrome P450 2K4-like
LOC104911716	2	2	1	0	1	2	uncharacterized LOC104911716
LOC104915201	5	2	2	1	1	2	metalloprotease TIK1-like
OPN4	1	2	1	1	1	2	opsin 4
LOC104913563							somatomedin-B and thrombospondin type-1 domain-containing protein-
	0	1	1	0	1	2	like
LOC100542403	0	1	0	1	1	2	protein-glutamine gamma-glutamyltransferase 6-like
LOC100546964	1	2	1	1	0	2	growth factor receptor-bound protein 14-like
STK32B	1	1	1	0	0	2	serine/threonine kinase 32B
LOC104916512	8	1	3	1	6	1	adenylate cyclase type 10-like
LOC104911471	2	4	2	2	5	1	nebullette-like
LOC104917415	1	1	2	1	3	1	sodium leak channel non-selective protein-like
CNGB3	2	2	2	1	2	1	cyclic nucleotide gated channel beta 1
LOC104916571	0	2	2	4	2	1	cytokine receptor common subunit beta-like
REG4	2	3	1	2	1	1	regenerating islet-derived family, member 4
LOC104910793	2	2	1	1	1	1	uncharacterized LOC104910793
LOC100545183	1	3	2	1	1	1	keratin, type II cytoskeletal 5-like
DEXI	2	2	1	3	1	1	de-etiolated homolog 1 (Arabidopsis)
OXGR1	0	2	1	1	1	1	oxoglutarate (alpha-ketoglutarate) receptor 1
LOC100546187	2	1	1	4	1	1	sorting nexin-9-like
LOC104911559	2	0	1	1	1	1	endogenous retrovirus group FC1 Env polyprotein
SFN	1	0	2	2	1	1	stratifin
CFAP61	3	1	3	2	1	1	cilia and flagella associated protein 58

LOC104910460	3	2	3	1	1	1	uncharacterized LOC104910460
LOC104914350	1	2	1	1	0	1	uncharacterized LOC104914350
LOC104909584	1	1	0	0	0	1	uncharacterized LOC104909584
LOC104911540	6	5	5	11	10	1	uncharacterized LOC104911540
LOC104914716	1	3	5	1	6	1	uncharacterized LOC104914716
LOC104911040	1	1	2	6	6	1	otogelin-like
LOC100551190	1	1	4	2	5	1	glioma pathogenesis-related protein 1-like
C3H7orf57	6	1	4	2	4	1	chromosome 3 open reading frame, human C6orf62
ACVR1C	2	5	2	4	4	1	activin A receptor, type IC
AGBL2	2	2	2	2	2	1	ATP/GTP binding protein-like 2
LOC100550742	2	1	1	1	2	1	T-cell surface glycoprotein CD8 alpha chain-like
GPR143	1	1	1	1	2	1	G protein-coupled receptor 142
LOC104913461	1	1	2	3	2	1	zinc finger CCCH domain-containing protein 11A-like
LOC104911833	3	2	1	2	2	1	uncharacterized LOC104911833
LOC104910085	3	2	2	1	2	1	coiled-coil domain-containing protein 81-like
LOC104913482	1	1	3	0	2	1	uncharacterized LOC104913482
TDRD1	1	3	3	2	1	1	tudor domain containing 1
LOC104912560	3	2	1	2	1	1	uncharacterized LOC104912560
PDC	2	1	0	1	1	1	phosducin
LOC104909971	0	1	1	1	1	1	myelin transcription factor 1-like protein
LOC104912675	0	1	0	1	1	1	uncharacterized LOC104912675
LOC104910244	1	2	2	1	1	1	uncharacterized LOC104910244
LOC104915311	0	1	2	0	1	1	uncharacterized LOC104915311
LOC104913257	0	1	0	0	1	1	uncharacterized LOC104913257
LOC104917567	3	2	1	1	1	1	short transient receptor potential channel 4
LOC104911212	2	1	0	2	1	1	uncharacterized LOC104911212
LOC104912411	1	1	1	0	1	1	uncharacterized LOC104912411
LOC104913048	5	2	1	3	1	1	uncharacterized LOC104913048
LOC104915393							
CCDC68	1	1	3	2	1	1	polycystic kidney disease and receptor for egg jelly-related protein-like
GPR55	0	1	2	2	1	1	coiled-coil domain containing 67
C13H16orf74	1	1	0	2	1	1	G protein-coupled receptor 52
LOC104911745	2	1	1	2	1	1	chromosome 13 open reading frame, human C16orf70
LOC104912004	2	1	2	1	1	1	uncharacterized LOC104911745
RIPK4	3	1	1	3	1	1	uncharacterized LOC104912004
LOC104914644	3	2	0	1	1	1	receptor-interacting serine-threonine kinase 4
C10H1orf177	0	0	0	1	1	1	uncharacterized LOC104914644
LOC104911682	0	0	1	0	1	1	chromosome 10 open reading frame, human C1orf168
LOC104910116	1	0	3	1	1	1	uncharacterized LOC104911682
LOC104909809	2	1	1	0	1	1	uncharacterized LOC104910116
LOC104914662	1	1	1	2	1	1	uncharacterized LOC104909809
LOC100548106	0	2	1	1	1	1	SH2 domain-containing adapter protein D-like
CYP1A5	0	1	1	1	1	1	hydroxyacylglutathione hydrolase-like
LOC104913421	2	0	1	0	1	1	cyldromatosis (turban tumor syndrome)
PTH	2	2	4	3	1	1	ras-associating and dilute domain-containing protein-like
LOC104911734	3	2	1	2	1	1	uncharacterized LOC104911734
LOC104911570	3	2	1	2	1	1	parathyroid hormone
LOC100542306	1	1	1	1	1	1	uncharacterized LOC104911570
LOC104912614	0	1	2	1	1	1	homeobox protein EMX1-like
LOC104912342	2	0	2	1	1	1	uncharacterized LOC104912614
LOC100541340	1	1	1	2	0	1	uncharacterized LOC104912342
LOC100545683	1	2	1	1	0	1	olfactory receptor 14C36-like
LOC104911906	1	1	0	0	0	1	neural-cadherin-like
LOC104913308	1	2	0	0	0	1	uncharacterized LOC104911906
LOC104909434	0	1	1	0	0	1	glutamate receptor 1-like
LOC104916566	1	0	1	0	0	1	NAD(P)(+)-arginine ADP-ribosyltransferase 2-like
LOC104910860	0	0	0	0	0	1	kinesin-like protein KIF20B
LOC100544169	0	1	1	0	0	1	hepatocyte growth factor activator-like
MYO15A	400	216	1	247	761	1	rap1 GTPase-activating protein 1
LOC104911946	5	6	3	6	9	1	myosin XVA
RAD21L1	2	4	4	3	6	1	uncharacterized LOC104911946
LOC104909599	1	4	3	3	4	1	RAD21-like 1 (S. pombe)
LOC104910802	4	2	5	3	4	1	uncharacterized LOC104909599
LOC104910765	2	2	4	3	4	1	uncharacterized LOC104910802
LOC104914397	6	2	4	6	4	1	uncharacterized LOC104910765
LOC104913427	2	5	4	3	3	1	synaptic vesicle glycoprotein 2A
LOC104912432	0	0	1	1	3	1	uncharacterized LOC104913427
LOC100544277	4	3	3	5	3	1	uncharacterized LOC104912432
LOC104911633	2	1	2	3	3	1	voltage-dependent calcium channel subunit alpha-2/delta-4
LOC104917346	2	3	3	1	2	1	V-type proton ATPase 116 kDa subunit a isoform 4-like
LOC104913856	2	1	4	2	2	1	uncharacterized LOC104917346
LOC104911607	1	0	3	1	2	1	uropod-like protein
NR5A1	0	2	1	1	2	1	uncharacterized LOC104911607
LOC104912012	2	0	2	1	2	1	nuclear receptor subfamily 5, group A, member 1
LOC104914993	1	1	1	2	2	1	uncharacterized LOC104912012
LOC104910602	3	3	4	4	1	1	uncharacterized LOC104914993
CLDN10	0	3	3	2	1	1	uncharacterized LOC104910602
LOC104909832	2	1	0	0	1	1	claudin 1
							adenylate kinase 9-like

PDCD1	5	1	6	1	1	1	programmed cell death 1
SLC34A1							solute carrier family 34 (type II sodium/phosphate cotransporter), member 1
LOC104917300	1	1	1	1	1	1	outer dense fiber protein 3-like
ELOVL3	0	0	0	0	1	1	ELOVL fatty acid elongase 2
LOC104912042	2	2	3	1	1	1	uncharacterized LOC104912042
LOC104915012	0	1	0	0	1	1	monocarboxylate transporter 13-like
RSPH14	1	0	0	0	1	1	radial spoke head 14 homolog (Chlamydomonas)
LOC104909981	0	0	1	0	1	1	uncharacterized LOC104909981
LOC104916265	2	1	2	1	1	1	AP-1 complex subunit mu-2-like
TEKT4	0	0	0	0	1	1	tektin 4
LOC104909783	1	0	0	0	1	1	uncharacterized LOC104909783
LOC104915735	0	2	2	0	1	1	uncharacterized LOC104915735
LOC104915025	0	1	0	1	1	1	MAP7 domain-containing protein 2-like
LOC104916444	1	0	1	1	1	1	
	0	0	0	0	1	1	voltage-dependent L-type calcium channel subunit alpha-1S-like
CSDC2	1	1	1	1	1	1	cysteine sulfonic acid decarboxylase
NXNL1	1	1	3	3	1	1	nucleoredoxin-like 1
LOC100547088	2	1	2	3	1	1	neuron-specific protein family member 1
TMEM27	1	1	2	1	1	1	transmembrane protein 27
LOC100542796	4	1	0	1	1	1	cytosolic phospholipase A2 epsilon-like
LOC104914152	2	1	1	1	0	1	gamma-aminobutyric acid receptor subunit delta
C30H19orf71	1	1	0	1	0	1	chromosome 30 open reading frame, human C19orf70
LOC104912038	1	0	1	1	0	1	uncharacterized LOC104912038
LOC104912406	2	1	0	0	0	1	uncharacterized LOC104912406
GNAT1	1	0	0	0	0	1	GNAS complex locus
LOC104910811	1	0	1	0	0	1	uncharacterized LOC104910811
LOC104913364	1	0	1	0	0	1	uncharacterized LOC104913364
LOC104909651	1	0	0	0	0	1	kinesin-like protein KIF6
LOC104910384	1	2	1	1	4	1	uncharacterized LOC104910384
LOC104917494	6	5	3	3	4	1	uncharacterized LOC104917494
LOC104916349	3	2	2	2	4	1	uncharacterized LOC104916349
ARL14	4	4	4	4	3	1	ADP-ribosylation factor-like 14
TSPAN8	2	1	1	2	3	1	tetraspanin 8
LOC104915673							membrane-associated guanylate kinase, WW and PDZ domain-containing protein 2-like
	3	2	3	3	3	1	uncharacterized LOC104913992
LOC104913992	1	1	2	2	3	1	ammonium transporter Rh type B pseudogene
LOC100550620	3	1	2	3	2	1	zinc finger protein neuro-d4-like
LOC104916443	3	1	4	1	2	1	lysophosphatidic acid receptor 6-like
LOC104912588	2	1	2	1	2	1	pleckstrin homology domain containing, family G (with RhoGef domain)
PLEKHG7							member 7
	2	1	2	3	2	1	uncharacterized LOC104911254
LOC104911254	3	3	1	4	2	1	uncharacterized LOC104913297
LOC104913297	0	0	0	1	2	1	serine/threonine-protein kinase PAK 1-like
LOC104909413	2	2	1	2	2	1	coagulation factor II (thrombin) receptor-like 2
F2RL3	2	3	1	4	1	1	uncharacterized LOC104910740
LOC104910740	0	0	1	2	1	1	uncharacterized LOC104917596
LOC104917596	2	1	1	1	1	1	BTB/POZ domain-containing protein KCTD16-like
LOC104912196	1	2	2	4	1	1	receptor-type tyrosine-protein phosphatase kappa-like
LOC104917100	1	2	1	1	1	1	dimethylaniline monooxygenase [N-oxide-forming] 5-like
LOC100540180	1	0	1	0	1	1	E3 ubiquitin-protein ligase HECTD3
LOC100546462	1	1	2	1	1	1	uncharacterized LOC104910514
LOC104910514	1	1	0	1	1	1	protein unc-13 homolog A-like
LOC104912809	2	1	1	2	1	1	urotensin 2B
UTS2B	1	0	2	1	1	1	uncharacterized LOC104915101
LOC104915101	2	2	2	2	0	1	uncharacterized LOC104911093
LOC104911093	0	1	1	2	0	1	dynein intermediate chain 1, axonemal-like
LOC104914767	2	2	2	2	0	1	uncharacterized LOC104915402
LOC104915402	1	0	1	1	0	1	leucine-rich repeats and transmembrane domains 1
LRTM1	1	0	1	0	0	1	uncharacterized LOC104909472
LOC104909472	1	1	0	0	0	1	sialic acid binding Ig-like lectin 15
SIGLEC15	1	0	0	0	0	1	NAD-dependent malic enzyme, mitochondrial-like
LOC104916490	25	8	1	7	21	1	
CACNA1D							calcium channel, voltage-dependent, N type, alpha 1B subunit
	12	7	8	9	6	1	immunoglobulin J polypeptide, linker protein for immunoglobulin alpha and mu polypeptides
IGLL1							uncharacterized LOC100549340
LOC100549350	7	1	6	5	4	1	cilia and flagella associated protein 45
CFAP52	1	2	3	2	3	1	atrial natriuretic peptide receptor 3-like
LOC104914826	4	5	2	3	3	1	neurotensin
NTS	2	3	3	2	3	1	solute carrier family 12 (sodium/potassium/chloride transporter), member 1
SLC12A1							tyrosinase
	2	1	5	2	3	1	uncharacterized LOC104911436
TYR	1	1	2	1	2	1	uncharacterized LOC104911640
LOC104911436	0	1	2	0	2	1	uncharacterized LOC104914149
LOC104911640	0	1	1	2	2	1	uncharacterized LOC104916392
LOC104914149	2	1	1	1	2	1	
LOC104916392	2	1	1	1	1	1	

LOC104913091	1	1	1	1	1	1	uncharacterized LOC104913091
LOC104916365	0	0	0	0	1	1	uncharacterized LOC104916365
LIPI	1	0	0	0	1	1	lipase, member H
LOC100544862	2	0	1	3	1	1	histone H2A-IV-like
C11H2orf54	2	1	1	2	1	1	chromosome 11 open reading frame, human C21orf2
LOC104914654	1	0	1	1	1	1	unconventional myosin-Vb-like
LOC104916766	0	0	0	0	1	1	probable G-protein coupled receptor 179
LOC104913901	0	2	1	2	0	1	endogenous retrovirus group K member 8 Pro protein-like
LOC100547722	1	0	0	2	0	1	ankyrin repeat and SAM domain-containing protein 6
GPRC6A	0	1	1	1	0	1	G protein-coupled receptor, class C, group 5, member C
LOC104914046	1	1	0	1	0	1	uncharacterized LOC104914046
SOX30	2	2	2	1	0	1	SRY (sex determining region Y)-box 30
IL21	1	1	1	1	0	1	interleukin 20 receptor beta
LOC104912219	1	0	0	1	0	1	AF4/FMR2 family member 2-like
LOC104912110	0	0	1	0	0	1	probable G-protein coupled receptor 34
LOC104909381	0	0	1	0	0	1	melatonin receptor type 1B
LOC104913589	7	4	7	2	6	1	zona pellucida sperm-binding protein 3-like
LOC104912269	4	2	2	4	6	1	uncharacterized LOC104912269
LOC104916595							
	4	4	6	2	4	1	erythroblast NAD(P)(+)-arginine ADP-ribosyltransferase-like
LOC100548920	1	2	2	2	3	1	adenylate cyclase type 7
LOC100544385	6	2	3	3	3	1	chloride channel protein CIC-Kb-like
SLC5A11							
	4	3	5	2	3	1	solute carrier family 5 (sodium/inositol cotransporter), member 11
TBX22	3	3	2	2	3	1	T-box 22
WNT6	3	1	3	2	3	1	wingless-type MMTV integration site family, member 6
LOC100548582	0	1	1	2	2	1	myosin-7B-like
LOC104910069	3	1	3	2	2	1	adenylate cyclase type 1-like
ETV7	4	3	4	2	2	1	ets variant 6
WDR27	1	1	2	2	2	1	WD repeat domain 27
LOC104909890	3	0	1	1	2	1	uncharacterized LOC104909890
LOC100548747	0	2	3	3	2	1	zinc finger homeobox protein 4-like
LOC104916637	4	3	2	2	2	1	spectrin beta chain, non-erythrocytic 4-like
LOC104914592	3	1	1	1	2	1	uncharacterized LOC104914592
NGB	0	2	1	1	2	1	neuroglobin
MSX2	0	6	4	2	2	1	msh homeobox 2
ACSM3	1	1	2	0	2	1	acyl-CoA synthetase medium-chain family member 3
LOC100544468	0	0	1	0	1	1	TOM1-like protein 2
ENDOU	6	5	3	5	1	1	endonuclease G
LOC104914026							
	1	0	1	1	1	1	potassium voltage-gated channel subfamily KQT member 2-like
LOC104912563	0	1	1	1	1	1	uncharacterized LOC104912563
LOC104912719	2	1	1	1	1	1	anoctamin-2-like
LOC104915399	5	1	5	3	1	1	uncharacterized LOC104915399
LOC104916138							
	2	1	1	0	1	1	granulocyte-macrophage colony-stimulating factor receptor subunit alpha-like
LOC104912594	1	1	2	1	1	1	structural maintenance of chromosomes protein 1B-like
LOC104916557	2	2	1	1	1	1	PHD finger protein 7-like
LOC100545399	1	1	1	1	1	1	autophagy-related protein 9A-like
ALX1	1	5	3	2	1	1	ALX homeobox 1
LOC104911299	0	2	0	1	1	1	uncharacterized LOC104911299
LOC104909932	1	0	0	0	1	1	uncharacterized LOC104909932
CCDC166	1	1	1	0	1	1	coiled-coil domain containing 157
LOC104915771	0	1	0	1	1	1	alpha-aminoadipic semialdehyde dehydrogenase-like
LOC100539497	1	1	0	2	0	1	epoxide hydrolase 1-like
SLC2A2							
	3	1	1	1	0	1	solute carrier family 2 (facilitated glucose transporter), member 2
AREG	0	0	0	1	0	1	amphiregulin
APOH	2	1	0	1	0	1	apolipoprotein H (beta-2-glycoprotein I)
LOC104915651	1	1	0	1	0	1	uncharacterized LOC104915651
LOC104912949	0	0	0	1	0	1	uncharacterized LOC104912949
LOC104917607	0	2	0	0	0	1	uncharacterized LOC104917607
LOC104915179	1	0	1	0	0	1	uncharacterized LOC104915179
LOC104911080	3	1	1	0	0	1	synaptotagmin-5-like
LOC104916166	1	0	1	0	0	1	E3 ubiquitin-protein ligase TRIM39-like
MORN2	1	0	2	0	0	1	MORN repeat containing 2
LOC104910150	1	1	1	0	0	1	cadherin-9-like
LOC100550475	1	0	1	0	0	1	ETS translocation variant 3-like protein
LOC104910251	1	2	0	0	0	1	disks large-associated protein 1-like
LOC104911186	9	3	4	3	11	1	uncharacterized LOC104911186
LOC104913135	7	4	6	4	6	1	uncharacterized LOC104913135
LOC104914929							
	4	3	1	2	4	1	A disintegrin and metalloproteinase with thrombospondin motifs 6-like
GHRH	1	2	5	4	2	1	growth hormone inducible transmembrane protein
LOC104910310	1	1	2	1	2	1	uncharacterized LOC104910310
LOC104911229	5	2	1	2	2	1	adenylate kinase 7-like
AGBL3	4	2	6	2	2	1	ATP/GTP binding protein-like 3
LOC100547944	2	1	2	4	2	1	nebulin
LOC100541518	2	2	3	2	2	1	caspase 8

LOC104915843	2	1	1	3	2	1	uncharacterized LOC104915843
CD4	2	1	2	2	2	1	CD3e molecule, epsilon (CD3-TCR complex)
RP1L1	0	1	2	2	2	1	retinitis pigmentosa 1-like 1
LOC104912404	1	2	0	3	2	1	uncharacterized LOC104912404
LOC104911127	1	1	3	2	2	1	embryonic protein UVS.2-like
KCNV1	4	3	2	3	1	1	potassium channel, subfamily U, member 1
LOC104913210	1	2	1	1	1	1	uncharacterized LOC104913210
GUCY2F	2	1	1	1	1	1	guanylate cyclase 2C (heat stable enterotoxin receptor)
CNTN6	0	1	1	1	1	1	contactin 5
NRG1	0	1	1	1	1	1	neuregulin 1
LOC104910477	1	0	0	1	1	1	brain-specific angiogenesis inhibitor 1-like
LOC104912399	1	2	4	1	1	1	uncharacterized LOC104912399
LOC104913326	0	0	0	0	1	1	uncharacterized LOC104913326
LOC104910613	1	0	1	1	1	1	uncharacterized LOC104910613
PLCXD3	2	4	4	2	1	1	phosphatidylinositol-specific phospholipase C, X domain containing 3
LOC104911472	1	2	1	1	1	1	armadillo repeat-containing protein 3-like
LOC104912828	0	1	1	0	1	1	uncharacterized LOC104912828
FMR1NB	1	1	1	1	1	1	fragile X mental retardation 1
KCNS2	1	1	1	0	1	1	potassium voltage-gated channel, delayed-rectifier, subfamily S, member 1
LOC104910543	1	0	0	0	1	1	uncharacterized LOC104910543
LOC104912965	1	1	0	0	1	1	uncharacterized LOC104912965
LOC104916966	2	2	1	1	1	1	homeobox protein GBX-2
LOC104912898	1	1	1	1	1	1	uncharacterized LOC104912898
ATP7B	1	0	1	0	1	1	ATPase, Cu++ transporting, beta polypeptide
LOC104910837	0	0	1	0	1	1	uncharacterized LOC104910837
AIFM3	1	2	1	2	0	1	apoptosis-inducing factor, mitochondrion-associated, 3
LOC104917470	1	1	2	1	0	1	uncharacterized LOC104917470
LOC104914082	0	2	0	1	0	1	papilin-like
LOC104910557	1	1	1	1	0	1	uncharacterized LOC104910557
F7	0	0	0	1	0	1	coagulation factor V (proaccelerin, labile factor)
LOC100544528	17	17	0	14	46	1	signal peptide, CUB and EGF-like domain-containing protein 3
IL18BP	4	2	6	2	5	1	interleukin 18
LOC100547603	6	6	6	6	5	1	probable G-protein coupled receptor 153
IL1R2	6	1	4	14	4	1	interleukin 18 receptor accessory protein
LOC104913095	2	2	1	2	3	1	uncharacterized LOC104913095
LOC100538928	2	1	0	1	3	1	AF4/FMR2 family member 3 pseudogene
IGFALS	8	2	2	3	3	1	insulin-like growth factor 2 receptor
CDHR3	5	1	3	2	3	1	cadherin-related family member 2
LOC104913351	2	3	3	2	3	1	uncharacterized LOC104913351
LOC100538434	9	5	4	5	3	1	lipid phosphate phosphatase-related protein type 4-like
C4H4orf50	0	2	1	3	2	1	chromosome 4 open reading frame, human C4orf48
CHRNA2	3	2	2	1	2	1	cholinergic receptor, nicotinic, alpha 10 (neuronal)
LOC104914089	2	3	5	2	2	1	nucleolar protein 4-like
RD3L	2	1	1	1	2	1	retinal degeneration 3-like
LOC104916310	3	1	2	1	2	1	platelet glycoprotein VI-like
LOC100547592	1	1	2	2	2	1	Krueppel-like factor 5
LOC104911076	0	1	0	1	2	1	uncharacterized LOC104911076
LOC104909885	0	2	1	1	2	1	glutamate receptor ionotropic, kainate 2-like
LOC104909994	4	2	3	2	1	1	uncharacterized LOC104909994
LOC104916232	1	0	0	0	1	1	tripartite motif-containing protein 7-like
SHOX2	5	1	1	2	1	1	short stature homeobox 2
LOC100547506	2	1	2	1	1	1	digestive cysteine proteinase 1-like
LOC104909983	1	1	2	1	1	1	uncharacterized LOC104909983
LOC104913314	0	1	2	3	1	1	uncharacterized LOC104913314
LOC104913381	3	2	4	3	1	1	putative short-chain dehydrogenase/reductase family 42E member 2
CD163	2	2	2	1	1	1	CD151 molecule (Raph blood group)
LOC104911530	2	1	0	1	1	1	uncharacterized LOC104911530
LOC104916725	1	2	1	1	1	1	CUGBP Elav-like family member 3
DRD4	3	2	3	1	1	1	dopamine receptor D3
LOC104912634	3	2	1	1	1	1	paired box protein Pax-3-like
GAL3ST2	0	1	3	0	1	1	galactose-3-O-sulfotransferase 1
LOC100550587	0	1	1	0	1	1	T-cell surface glycoprotein CD8 alpha chain-like
LOC100542437	2	2	1	2	1	1	neuropeptide Y receptor type 4-like
LOC104915653	2	0	1	0	1	1	mucin-2-like
NR0B2	1	2	1	0	1	1	nuclear receptor subfamily 0, group B, member 2
CERKL	3	1	1	1	1	1	ceramide kinase
LOC104915286	0	0	0	0	1	1	uncharacterized LOC104915286
PNMT	0	2	1	1	1	1	phenylethanolamine N-methyltransferase
LOC100549764	1	1	1	1	1	1	hydroxyacid oxidase 1
APOB	2	1	2	1	1	1	apolipoprotein B
LOC104915626	2	1	1	0	1	1	uncharacterized LOC104915626
FGB	2	2	1	2	0	1	fibrinogen alpha chain
LOC104909221	1	3	3	1	0	1	protein piccolo-like
LOC104913158	4	1	2	1	0	1	urocortin-3-like
LOC100540742	1	2	1	1	0	1	cytochrome b5

LOC100544780	1	2	2	1	0	1	POU domain, class 3, transcription factor 3-like
LOC104909460	0	0	0	1	0	1	uncharacterized LOC104909460
OTOP2	1	1	1	1	0	1	otopetirin 2
LOC104913116	1	1	0	0	0	1	protein bassoon-like
LOC104910166	2	1	2	0	0	1	uncharacterized LOC104910166
POU2F3	0	1	1	0	0	1	POU class 2 homeobox 3
NOL4	0	0	1	0	0	1	nucleolar protein 4
LOC104912457	1	0	1	0	0	1	uncharacterized LOC104912457
LOC104911827	0	1	0	0	0	1	uncharacterized LOC104911827
LOC104910828	0	0	0	0	0	1	uncharacterized LOC104910828
LOC104909287	0	0	0	0	0	1	kinase suppressor of Ras 2-like
LOC104912286	23	1	29	9	26	1	uncharacterized LOC104912286
MMP9							matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase)
LOC104913093	2	2	1	1	5	1	uncharacterized LOC104913093
LOC104912198	1	1	4	2	4	1	uncharacterized LOC104912198
LOC104912827	1	2	4	2	4	1	uncharacterized LOC104912827
SSTR1	3	2	2	2	3	1	somatostatin receptor 1
NEUROD4	1	2	2	1	3	1	neuronal differentiation 4
LOC104913569	4	5	4	3	3	1	T-box-containing protein TBX6L-like
LOC100550023	1	0	1	4	2	1	dachshund homolog 1
LOC104912088	2	2	2	2	2	1	uncharacterized LOC104912088
GDF9	4	3	5	3	2	1	growth differentiation factor 7
RGS7	6	3	2	2	2	1	regulator of G-protein signaling 7
FAM81B	2	1	2	1	2	1	family with sequence similarity 81, member A
PITX1	1	10	15	3	1	1	paired-like homeodomain 1
LOC104912351	0	2	3	4	1	1	uncharacterized LOC104912351
LOC100540787	1	0	0	0	1	1	fibrinogen-like protein 1
LOC104916126	1	2	0	0	1	1	kallikrein-13-like
LOC104910669	1	0	1	0	1	1	uncharacterized LOC104910669
LOC100544821	3	2	2	3	1	1	disks large homolog 3
AIM1L	2	2	1	1	1	1	absent in melanoma 1-like
LOC104912805							
	2	1	1	3	1	1	proline-serine-threonine phosphatase-interacting protein 1-like
LOC104911768	1	1	2	1	1	1	sodium-driven chloride bicarbonate exchanger-like
LOC104910824	0	1	2	1	1	1	uncharacterized LOC104910824
ZNF750	0	1	1	0	1	1	zinc finger protein 750
LOC104912155	0	0	0	0	1	1	uncharacterized LOC104912155
LOC104912779	4	2	2	2	1	1	protein FAM81A-like
PRSS57	0	1	0	2	1	1	protease, serine, 57
CCDC67	3	1	1	0	1	1	coiled-coil domain containing 66
LOC100550171	1	1	1	0	1	1	putative RNA-binding protein Luc7-like 2
NETO1	1	2	1	2	1	1	neuropilin (NRP) and toll-like 1
LOC104917383	1	1	1	1	1	1	interferon-like
P2RX2	1	2	2	0	1	1	purinergic receptor P2X, ligand-gated ion channel, 2
UPK3B	1	1	1	0	1	1	uroplakin 3B
LOC104916615	1	0	0	0	1	1	protein MANBAL-like
LOC104909278	2	6	4	4	0	1	protein piccolo-like
LOC104913473	0	0	1	1	0	1	glucagon receptor-like
LOC104914072	2	0	1	1	0	1	uncharacterized LOC104914072
LOC100550050	0	0	1	1	0	1	toll-like receptor 13
LOC104911483	2	1	0	1	0	1	uncharacterized LOC104911483
LOC104912869	2	1	1	1	0	1	uncharacterized LOC104912869
LOC104911775	1	2	3	1	0	1	glutamate decarboxylase 1-like
LOC100539818	0	2	1	1	0	1	anthrax toxin receptor 2
LOC100548534	1	1	0	1	0	1	tubulin alpha-4 chain
LOC100541203	0	0	1	1	0	1	NADH-cytochrome b5 reductase 2
LOC100551363							
	2	1	2	0	0	1	disintegrin and metalloproteinase domain-containing protein 21-like
LOC104914500	1	1	2	0	0	1	uncharacterized LOC104914500
LOC104915885	0	1	0	0	0	1	uncharacterized LOC104915885
LOC100550104	0	1	0	0	0	1	olfactory receptor 6B1-like
LOC104916217	0	0	1	0	0	1	DC-STAMP domain-containing protein 1-like
EVX1	0	0	0	0	0	1	envoplakin
LOC100303688	0	0	0	0	0	1	interleukin-4
LOC100543433							
	0	0	0	0	0	1	immunoglobulin superfamily containing leucine-rich repeat protein 2-like
LOC104909742	6	3	7	3	6	1	uncharacterized LOC104909742
SSPO	3	5	2	6	5	1	SCO-spondin
LOC104913935	2	0	0	0	4	1	cell adhesion molecule 2-like
LOC104913099	2	2	1	1	4	1	uncharacterized LOC104913099
LOC104911103	2	2	3	2	3	1	uncharacterized LOC104911103
LOC104910812	0	1	10	1	3	1	NACHT, LRR and PYD domains-containing protein 1-like
HTR1F							
	1	0	1	0	2	1	5-hydroxytryptamine (serotonin) receptor 1E, G protein-coupled
GABRG1	4	3	3	5	2	1	gamma-aminobutyric acid (GABA) A receptor, epsilon
LOC104913250	1	0	10	3	2	1	serine protease inhibitor Kazal-type 6-like
RASAL1	3	2	2	1	2	1	RAS protein activator like 1 (GAP1 like)
LOC104910838	1	0	1	0	2	1	uncharacterized LOC104910838

FOXI2	3	3	1	3	2	1	forkhead box I1
LOC104911506	2	6	2	8	2	1	uncharacterized LOC104911506
LOC104917551	1	2	1	1	2	1	uncharacterized LOC104917551
TSPAN1	1	0	1	0	2	1	tetraspanin 1
LOC104912089	2	0	2	1	2	1	uncharacterized LOC104912089
EMB	1	1	3	0	2	1	EGF, latrophilin and seven transmembrane domain containing 1
TSHB	1	0	0	1	2	1	thyroid stimulating hormone, beta
LOC100545870	1	1	1	2	2	1	ovostatin-like
LOC104915374	1	2	1	2	2	1	putative histone-lysine N-methyltransferase PRDM6
TTC36	0	1	1	0	2	1	tetratricopeptide repeat domain 36
LOC100548643	2	2	2	1	2	1	hemoglobin subunit epsilon
LOC104916973	3	2	3	0	2	1	transcription factor Sp5
KHK	2	1	1	0	2	1	KH domain containing, RNA binding, signal transduction associated 3
LOC104911516	1	0	2	2	2	1	uncharacterized LOC104911516
LOC100546874	0	1	2	3	1	1	5-hydroxyisourate hydrolase-like
ANKFN1	4	3	2	1	1	1	ankyrin-repeat and fibronectin type III domain containing 1
GJA3	2	1	1	1	1	1	gap junction protein, alpha 10, 62kDa
NME8	1	1	1	1	1	1	NME/NM23 family member 8
LOC104914413	1	0	5	1	1	1	keratinocyte proline-rich protein-like
LOC104909868	3	1	2	1	1	1	kelch-like protein 32
BHLHE23	0	1	1	1	1	1	basic helix-loop-helix family, member e23
LOC104909680	0	1	1	1	1	1	uncharacterized LOC104909680
LOC104911554	1	1	3	1	1	1	uncharacterized LOC104911554
TMEM213	2	2	2	2	1	1	transmembrane protein 213
LOC104914790	1	1	1	2	1	1	maestro heat-like repeat-containing protein family member 2B
WDR88	1	2	4	1	1	1	WD repeat domain 88
LOC104911215	0	2	2	1	1	1	uncharacterized LOC104911215
LOC104915403	1	0	1	1	1	1	claudin domain-containing protein 1-like
IL21R	0	0	1	1	1	1	interleukin 21
LOC104913703	1	0	0	1	1	1	uncharacterized LOC104913703
ASCL1	4	1	3	1	1	1	achaete-scute family bHLH transcription factor 1
LOC100542789	1	0	0	1	1	1	glutamate receptor 4-like
LOC104917025	1	1	3	1	1	1	heterogeneous nuclear ribonucleoprotein 87F-like
LOC104914373	1	0	1	1	1	1	uncharacterized LOC104914373
LOC104915789	1	2	2	1	1	1	long-chain fatty acid transport protein 6-like
LOC100543002	1	0	0	0	1	1	40S ribosomal protein S4-like
LOC104911269	0	1	0	0	1	1	histone H3.3
LOC104910521	0	1	0	1	1	1	uncharacterized LOC104910521
LOC104914564	0	1	2	1	1	1	EF-hand domain-containing family member C2-like
ARRDC5	0	0	1	1	1	1	arrestin domain containing 5
TCHH	1	1	0	1	1	1	trichohyalin
LOC100541447	0	0	1	1	1	1	immunoglobulin superfamily member 1-like
LOC104917076	1	2	1	1	1	1	uncharacterized LOC104917076
LOC100549461	1	1	1	1	1	1	cadherin-12
LOC104910612	1	1	2	0	1	1	uncharacterized LOC104910612
LOC104914991	0	0	1	0	1	1	uncharacterized LOC104914991
KCNC4	1	1	2	1	1	1	potassium voltage-gated channel, Shaw-related subfamily, member 2
PNPLA1	2	0	0	1	1	1	patatin-like phospholipase domain containing 1
LOC104911824	1	1	2	1	1	1	uncharacterized LOC104911824
LOC100543637	0	0	1	1	1	1	ovoinhibitor
CGA	0	0	0	0	1	1	cystic fibrosis transmembrane conductance regulator (ATP-binding cassette sub-family C, member 7)
LOC104909545	0	0	2	0	1	1	uncharacterized LOC104909545
LOC100549202	0	0	1	0	1	1	glutamate receptor ionotropic, kainate 1-like
TMC2	0	0	0	0	1	1	transmembrane channel-like 2
LOC104909374	0	0	1	0	1	1	uncharacterized LOC104909374
LOC100540823	2	3	1	0	1	1	guanine nucleotide-binding protein G(k) subunit alpha-like
LOC100548429	0	1	2	2	1	1	histone H5
LOC104911803	1	1	2	2	1	1	kalirin-like
AGBL4	1	0	1	2	1	1	ATP/GTP binding protein-like 4
LOC104909359	3	1	0	1	1	1	periphrin-1-like
LOC100538614	3	1	2	1	1	1	solute carrier organic anion transporter family member 1C1-like
BCL2L15	2	1	1	1	1	1	BCL2-like 15
LOC104913853	1	0	0	1	1	1	uncharacterized LOC104913853
LOC104914702	2	2	1	1	1	1	paramyosin-like
LOC104913160	0	1	1	1	1	1	uncharacterized LOC104913160
SCRT2	2	1	1	1	1	1	scratch family zinc finger 2
C3H18orf63	1	3	1	1	1	1	chromosome 3 open reading frame, human C18orf42
LOC104912079	3	1	1	0	1	1	uncharacterized LOC104912079
SLC17A8	0	1	1	0	1	1	solute carrier family 17 (vesicular glutamate transporter), member 8
LOC104917241	0	1	1	0	1	1	maestro heat-like repeat-containing protein family member 2B

LOC104915663	0	0	0	0	1	1	maestro heat-like repeat-containing protein family member 2B
LOC100548962	2	1	3	3	0	1	RUN domain-containing protein 3B-like
LOC104915682	1	1	1	2	0	1	protocadherin alpha-13-like
LOC104911477	0	1	0	2	0	1	BPI fold-containing family C protein-like
DFNB31	3	2	2	2	0	1	deafness, autosomal dominant 5
LOC104911825	2	7	1	2	0	1	uncharacterized LOC104911825
LOC104916891	3	1	1	2	0	1	interleukin-36 receptor antagonist protein-like
LOC104916955	2	4	5	2	0	1	uncharacterized LOC104916955
LOC104914464	1	0	1	1	0	1	tetraspanin-18-like
LOC104909756	1	0	1	1	0	1	ensconsin-like
LOC100550526	1	2	1	1	0	1	poly(U)-specific endoribonuclease-like
ZIC1	1	0	0	1	0	1	Zic family member 1
LOC104911974	0	0	0	1	0	1	uncharacterized LOC104911974
LOC104913684	1	1	1	1	0	1	uncharacterized LOC104913684
DISP2	0	0	0	1	0	1	dispatched homolog 1 (Drosophila)
LOC104910068	2	0	1	1	0	1	uncharacterized LOC104910068
LOC104912424	1	1	1	1	0	1	uncharacterized LOC104912424
LOC104914439	0	0	0	1	0	1	uncharacterized LOC104914439
SEZ6	0	1	0	1	0	1	seizure related 6 homolog (mouse)
LOC100549453	0	0	1	1	0	1	kelch-like protein 42
HMX2	0	0	0	1	0	1	H6 family homeobox 1
LOC104914233	0	0	0	1	0	1	uncharacterized LOC104914233
LOC104909655	1	1	1	1	0	1	uncharacterized LOC104909655
LOC104914299	0	1	0	1	0	1	uncharacterized LOC104914299
LOC104915769	0	1	1	0	0	1	maestro heat-like repeat-containing protein family member 2B
LOC104913076	0	1	1	0	0	1	uncharacterized LOC104913076
LOC104909721	1	1	1	0	0	1	uncharacterized LOC104909721
LOC104913995	1	1	0	0	0	1	uncharacterized LOC104913995
LOC104917438	1	0	1	0	0	1	glypican-6-like
IQCI	0	0	0	0	0	1	IQ motif containing H
PGLYRP2	0	0	0	0	0	1	peptidoglycan recognition protein 2
LOC104917488	1	1	2	0	0	1	uncharacterized LOC104917488
TNFRSF13C	0	1	0	0	0	1	tumor necrosis factor receptor superfamily, member 13C
LOC104914849	1	0	0	0	0	1	uncharacterized LOC104914849
LOC100549451	0	0	0	0	0	1	inactive phospholipase C-like protein 2
LOC100545254	0	0	0	0	0	1	sulfotransferase 1C1-like
LOC104916332	0	1	0	0	0	1	KRAB domain-containing protein 1-like
LOC100543786	0	0	0	0	0	1	zinc finger and BTB domain-containing protein 41
LOC100541138	0	0	0	0	0	1	histone H2A-beta, sperm-like
LOC104911724	0	1	4	0	0	1	uncharacterized LOC104911724
LOC104911543	0	0	1	0	0	1	uncharacterized LOC104911543
C26H11orf88	0	0	1	0	0	1	chromosome 26 open reading frame, human C11orf63
LOC104916985	0	1	0	0	0	1	uncharacterized LOC104916985
LOC104916626	1	0	0	0	0	1	pyruvate dehydrogenase (acetyl-transferring) kinase isozyme 1, mitochondrial-like
LOC104910832	0	0	0	0	0	1	uncharacterized LOC104910832
PTX4	0	0	2	0	0	1	pentraxin 4, long
LOC104913996	1	0	1	0	0	1	uncharacterized LOC104913996
LOC100544185	0	0	1	0	0	1	uncharacterized LOC100544170
LOC104913429	0	0	1	0	0	1	griffin
LOC104909665	0	0	1	0	0	1	uncharacterized LOC104909665
EIF4E1B	0	1	0	0	0	1	eukaryotic translation initiation factor 4E
LOC104911393	0	1	0	0	0	1	armadillo repeat-containing protein 4-like
LOC104912162	0	0	0	0	0	1	uncharacterized LOC104912162
GPX2	0	0	0	0	0	1	glutathione peroxidase 1
LOC100543573	0	0	0	0	0	1	core histone macro-H2A.2
LOC104917174	0	0	0	0	0	1	small nuclear ribonucleoprotein U11/U12 subunit 25
LOC104916876	0	0	0	0	0	1	feather keratin Cos1-1/Cos1-3/Cos2-1-like
LOC104915632	0	0	0	0	0	1	solute carrier family 2, facilitated glucose transporter member 11-like
SPINT4	0	0	0	0	0	1	serine peptidase inhibitor, Kunitz type 4
LOC100548382	1	0	0	0	0	1	heme-binding protein 1-like
LOC104911176	1	0	0	0	0	1	uncharacterized LOC104911176
LOC104917502	1	0	0	0	0	1	uncharacterized LOC104917502
CD86	0	0	0	0	0	1	CD84 molecule
LOC104909593	0	0	0	0	0	1	uncharacterized LOC104909593
LOC104912523	0	0	0	0	0	1	zonadhesin-like
LOC104913195	0	0	0	0	0	1	uncharacterized LOC104913195
LOC104914349	0	0	0	0	0	1	uncharacterized LOC104914349
LOC104915259	0	0	0	0	0	1	G-protein coupled receptor 98-like
LOC104915593	0	0	0	0	0	1	uncharacterized LOC104915593
PDYN	0	0	0	0	0	1	prodynorphin
LOC104916704	62	43	0	44	193	1	uncharacterized LOC104916704
LOC104915780	48	28	0	15	67	1	ras GTPase-activating protein 1-like
LOC104917080	6	2	6	4	9	1	uncharacterized LOC104917080
LOC104909614	4	3	2	5	6	1	uncharacterized LOC104909614
LOC104909579	5	6	1	4	5	1	uncharacterized LOC104909579

LOC104915702	4	1	5	2	5	1	uncharacterized LOC104915702
LOC104911924	5	3	5	2	4	1	uncharacterized LOC104911924
GPR112	3	1	2	1	4	1	G protein-coupled receptor 107
LOC104910218	2	2	4	1	4	1	GLIPR1-like protein 1
LOC100544098	2	2	1	1	3	1	uncharacterized LOC100544098
LOC104916757	3	0	1	2	3	1	alpha-2-macroglobulin-like protein 1
LRFN2							
	4	2	4	3	3	1	leucine rich repeat and fibronectin type III domain containing 2
LOC104911494	0	0	1	2	3	1	dynein heavy chain 11, axonemal-like
LOC104911725	1	2	1	2	2	1	myosin-IIb-like
LOC104909316	3	1	2	3	2	1	low-density lipoprotein receptor-related protein 1B-like
LOC104915794	2	2	1	1	2	1	uncharacterized LOC104915794
LOC104911757	0	2	0	0	2	1	desert hedgehog protein-like
CCDC17	1	1	1	1	2	1	coiled-coil domain containing 169
LOC100539035							N-acetyllactosaminide beta-1,6-N-acetylglucosaminyl-transferase, isoform C-like
	2	1	1	0	2	1	
ARID3C	2	1	1	2	2	1	AT rich interactive domain 3C (BRIGHT-like)
LOC104911849	1	2	2	3	2	1	uncharacterized LOC104911849
CPLX3	1	1	1	2	2	1	complexin 2
STRA6	1	1	2	2	2	1	stimulated by retinoic acid 6
KCTD14	0	1	1	1	2	1	potassium channel tetramerization domain containing 10
LOC104909814	1	2	0	2	1	1	proto-oncogene tyrosine-protein kinase ROS-like
TMEM240	1	2	2	1	1	1	transmembrane protein 240
LOC104917104	1	1	2	1	1	1	uncharacterized LOC104917104
LOC100547361							
	0	0	0	0	1	1	complement C1q and tumor necrosis factor-related protein 9A-like
LOC104913092	1	1	1	1	1	1	uncharacterized LOC104913092
LOC104910792	0	2	2	1	1	1	uncharacterized LOC104910792
LOC104913219	2	0	1	1	1	1	uncharacterized LOC104913219
LOC104913277	1	2	2	2	1	1	uncharacterized LOC104913277
LOC104912534	2	1	1	1	1	1	uncharacterized LOC104912534
LOC104914535	0	0	1	0	1	1	trem-like transcript 4 protein
LOC100540701	1	1	0	0	1	1	G protein-coupled receptor kinase 4
NKAIN2	2	0	1	0	1	1	Na+/K+ transporting ATPase interacting 2
LOC104911526	1	3	2	1	1	1	uncharacterized LOC104911526
LNP1	1	1	1	0	1	1	LIM homeobox transcription factor 1, beta
ZC2HC1B	1	1	2	0	1	1	zinc finger, C2HC-type containing 1B
LOC104916580	2	1	1	1	1	1	7-dehydrocholesterol reductase-like
LOC104916765	1	0	4	1	1	1	platelet glycoprotein VI-like
LOC100545863	2	0	3	1	1	1	dmX-like protein 1
LOC104909659	0	1	1	0	1	1	formin-2-like
LOC104912874	1	3	2	1	1	1	uncharacterized LOC104912874
LOC104916478	1	1	1	1	1	1	homeobox protein Nkx-6.2-like
LOC104911967	0	0	0	1	1	1	bone morphogenetic protein 7-like
LOC104915224	1	1	2	0	1	1	uncharacterized LOC104915224
LOC104910160	1	1	0	0	1	1	uncharacterized LOC104910160
LOC104914931							
	2	2	1	2	1	1	A disintegrin and metalloproteinase with thrombospondin motifs 6-like
ACE2	1	0	3	1	1	1	angiotensin I converting enzyme 2
LOC100548257	0	0	0	0	1	1	cytochrome b5 type B
LOC104911877							
	1	1	1	0	1	1	voltage-dependent L-type calcium channel subunit alpha-1C-like
LOC104911342	1	1	1	2	1	1	uncharacterized LOC104911342
LOC100547716	0	1	1	2	1	1	membrane-bound transcription factor site-2 protease-like
LOC104913532	1	0	1	1	1	1	uncharacterized LOC104913532
LOC104909408	0	1	1	1	1	1	uncharacterized LOC104909408
LOC104913315	0	0	1	1	1	1	uncharacterized LOC104913315
LOC104909690	2	1	1	1	1	1	uncharacterized LOC104909690
WFDC3	1	1	1	0	1	1	WAP four-disulfide core domain 3
LOC104911594	1	1	1	0	1	1	uncharacterized LOC104911594
LOC104916653	0	1	1	0	1	1	adenylate cyclase type 10-like
LOC104910704	0	0	2	0	1	1	uncharacterized LOC104910704
ASZ1							
	0	0	1	0	1	1	ankyrin repeat, SAM and basic leucine zipper domain containing 1
LOC104910263	0	1	0	0	1	1	uncharacterized LOC104910263
LOC104914370	0	1	0	2	1	1	uncharacterized LOC104914370
LOC104912796	1	1	0	1	1	1	uncharacterized LOC104912796
LOC104917265	0	1	1	1	1	1	uncharacterized LOC104917265
LOC100550934	0	0	0	1	1	1	adenylate cyclase type 1-like
LOC104913040	0	0	1	1	1	1	uncharacterized LOC104913040
TAAR5	0	0	0	0	1	1	trace amine associated receptor 5
LOC104915444	0	1	2	0	1	1	uncharacterized LOC104915444
LOC104910622	1	0	1	0	1	1	uncharacterized LOC104910622
LOC104911475	1	2	1	0	1	1	uncharacterized LOC104911475
LOC104916110	1	0	1	0	1	1	transcription factor AP-2 gamma-like
LOC104916817	1	0	0	0	1	1	uncharacterized LOC104916817
NIPAL1	2	3	3	3	1	1	NIPA-like domain containing 1
LOC104910338	2	1	1	1	1	1	coiled-coil domain-containing protein 178-like
LOC104917430	1	0	1	0	1	1	uncharacterized LOC104917430

LOC100547089	2	7	1	0	1	1	class II histocompatibility antigen, B-L beta chain-like
LOC104912622	1	0	0	0	1	1	zonadhesin-like
LOC104912829	0	0	1	0	1	1	uncharacterized LOC104912829
CNTN5	0	1	0	0	1	1	contactin 4
LOC104915420	0	2	1	2	1	1	uncharacterized LOC104915420
LOC104917393	0	1	1	1	1	1	ATP-dependent RNA helicase DDX25-like
PROX2	0	0	2	1	1	1	prospero homeobox 2
LOC100542906	1	1	1	1	1	1	neurotrypsin-like
TPPP2	1	1	2	1	1	1	tubulin polymerization-promoting protein family member 2
LOC100543903	0	0	0	1	1	1	TOX high mobility group box family member 2-like
LOC104913021	1	1	1	1	1	1	epithelial splicing regulatory protein 2-like
LOC104912453	0	0	3	1	1	1	uncharacterized LOC104912453
LOC104915200	3	1	1	0	1	1	metalloprotease TIK1-like
EFCAB3	0	0	0	0	1	1	EF-hand calcium binding domain 2
C1H21orf62	1	0	0	0	1	1	chromosome 1 open reading frame, human C21orf59
LOC100549507	1	1	1	0	1	1	melatonin receptor type 1B-like
LOC104912394	1	0	0	0	1	1	uncharacterized LOC104912394
LOC104916590	2	1	2	0	1	1	uncharacterized LOC104916590
LOC104915226	0	1	0	0	1	1	cytoplasmic tyrosine-protein kinase BMX-like
LOC104913706	0	0	0	0	1	1	uncharacterized LOC104913706
LOC104910180	0	0	0	0	1	1	uncharacterized LOC104910180
SLC5A1							
	1	1	2	0	1	1	solute carrier family 5 (sodium/glucose cotransporter), member 1
LOC104911328	0	0	1	0	1	1	uncharacterized LOC104911328
LOC104910288	0	0	0	0	1	1	uncharacterized LOC104910288
LOC104915422	0	0	0	0	1	1	uncharacterized LOC104915422
LOC104916645	2	1	0	3	0	1	transmembrane protein FLJ37396-like
LOC104910901	2	2	4	2	0	1	probable E3 SUMO-protein ligase RNF212
LOC104910991	1	1	2	2	0	1	serologically defined colon cancer antigen 3 homolog
XIRP2	0	1	0	2	0	1	xin actin-binding repeat containing 2
LOC104911873	2	2	4	2	0	1	uncharacterized LOC104911873
LOC104909748	1	1	2	2	0	1	uncharacterized LOC104909748
LOC100538588	4	1	1	1	0	1	lipid phosphate phosphatase-related protein type 5
LOC104911441	4	2	2	1	0	1	uncharacterized LOC104911441
LOC104914985	0	0	0	1	0	1	uncharacterized LOC104914985
LOC104915677	1	1	1	1	0	1	protocadherin alpha-5-like
LOC104911675	1	2	2	1	0	1	uncharacterized LOC104911675
STMND1	1	2	0	1	0	1	stathmin domain containing 1
LOC104915267	1	1	1	1	0	1	uncharacterized LOC104915267
LOC104911350	0	1	2	1	0	1	uncharacterized LOC104911350
LOC100543274	0	1	3	1	0	1	E3 ubiquitin-protein ligase RNF130-like
LOC104916960	1	1	1	1	0	1	larval cuticle protein F1-like
HRG	1	1	1	1	0	1	HRAS-like suppressor
CLDN14	0	1	0	1	0	1	claudin 12
LOC104914191	0	0	0	1	0	1	basic phospholipase A2 Cdr-13-like
CLPS							
	1	1	1	1	0	1	caseinolytic mitochondrial matrix peptidase proteolytic subunit
LOC104911228	1	1	0	1	0	1	alpha-1-antitrypsin-like
BFSP2	1	1	3	1	0	1	beaded filament structural protein 2, phakinin
LOC104912265	0	0	0	1	0	1	uncharacterized LOC104912265
LOC104916610	0	1	0	1	0	1	dynein heavy chain 3, axonemal-like
LOC104915641	0	0	1	1	0	1	niban-like protein 1
LOC104911528	0	1	1	1	0	1	uncharacterized LOC104911528
LOC104913832	1	1	1	1	0	1	uncharacterized LOC104913832
TCF21	3	0	1	1	0	1	transcription factor 21
KPNA7	0	0	0	1	0	1	karyopherin alpha 6 (importin alpha 7)
LOC104915549	1	0	0	0	0	1	uncharacterized LOC104915549
LOC104913507	1	1	1	0	0	1	uncharacterized LOC104913507
FOXI3	1	0	0	0	0	1	forkhead box I2
LOC104915816	0	0	0	0	0	1	claudin-3
LOC104910415	1	0	0	0	0	1	uncharacterized LOC104910415
LOC100549505	0	1	0	0	0	1	antigen peptide transporter 2-like
SLC30A8	0	2	1	0	0	1	solute carrier family 30 (zinc transporter), member 8
LOC104917253	1	0	1	0	0	1	uncharacterized LOC104917253
LRRIQ1	0	1	1	0	0	1	leucine-rich repeats and IQ motif containing 1
LOC104912204	0	1	1	0	0	1	uncharacterized LOC104912204
LOC104912574	1	0	1	0	0	1	uncharacterized LOC104912574
LOC104915157	0	0	1	0	0	1	uncharacterized LOC104915157
LOC104911070	0	1	1	0	0	1	uncharacterized LOC104911070
LOC104917544	0	0	0	0	0	1	uncharacterized LOC104917544
LOC104910061	0	0	2	0	0	1	tyrosine-protein kinase Blk-like
LOC104914596	0	1	1	0	0	1	uncharacterized LOC104914596
LOC104912035	2	0	1	0	0	1	uncharacterized LOC104912035
OTOP1	0	1	0	0	0	1	otopetrin 1
LOC104914042	0	0	0	0	0	1	E3 ubiquitin-protein ligase RNF8-B-like
LOC104911170	0	0	0	0	0	1	uncharacterized LOC104911170
LOC104913285	0	0	1	0	0	1	uncharacterized LOC104913285
LOC104910683	1	0	0	0	0	1	cGMP-dependent protein kinase 2-like
GCNT3	0	0	0	0	0	1	glucosaminyl (N-acetyl) transferase 1, core 2

LOC100550942	0	0	0	0	0	1	claudin-8-like
LOC104913798	0	1	2	0	0	1	uncharacterized LOC104913798
GHRHR	1	1	1	0	0	1	growth hormone releasing hormone
LOC104911689	0	1	1	0	0	1	uncharacterized LOC104911689
KIF2B	0	0	1	0	0	1	kinesin family member 27
CSH14orf105	1	0	1	0	0	1	chromosome 5 open reading frame, human C11orf94
LOC104910926	0	0	1	0	0	1	uncharacterized LOC104910926
LOC100546606	1	1	0	0	0	1	heat shock protein 105 kDa
MEI4	0	1	0	0	0	1	meiosis-specific 4 homolog (S. cerevisiae)
LOC104917086	0	0	0	0	0	1	fer-1 like family member 5
LOC104915266	0	0	0	0	0	1	uncharacterized LOC104915266
HAO2	1	0	0	0	0	1	heart and neural crest derivatives expressed 2
ECEL1	0	0	0	0	0	1	endothelin converting enzyme 2
LOC104910052	0	0	0	0	0	1	uncharacterized LOC104910052
LOC104916616	0	0	0	0	0	1	uncharacterized LOC104916616
LOC104916135	1	0	0	0	0	1	RIMS-binding protein 3A-like
LOC104911177	1	0	0	0	0	1	uncharacterized LOC104911177
GSC2	0	0	0	0	0	1	goosecoid homeobox
LOC104910062	0	0	0	0	0	1	patched domain-containing protein 4-like
LOC104910176	0	0	0	0	0	1	uncharacterized LOC104910176
LOC104914020	0	0	0	0	0	1	uncharacterized LOC104914020
LOC104915238	0	0	0	0	0	1	endogenous retrovirus group K member 25 Pol protein-like
LOC104916140	0	0	0	0	0	1	cAMP-dependent protein kinase regulatory subunit-like
LOC104917416	0	0	0	0	0	1	uncharacterized LOC104917416
LOC104915539	9	5	1	5	9	1	chromodomain-helicase-DNA-binding protein 1-like
LOC104916799	4	2	5	1	7	1	cytokine receptor common subunit beta-like
LOC100539639	3	2	1	3	6	1	ATP-dependent RNA helicase DDX25-like
LOC100546724	2	4	3	5	5	1	cholesterol 24-hydroxylase
LOC104916483	6	1	1	2	4	1	beta-citrylglytamate synthase B-like
LOC104909652	3	2	3	2	4	1	uncharacterized LOC104909652
LOC100540856	3	5	4	2	4	1	raftlin-like
LOC104913309	6	3	1	1	4	1	uncharacterized LOC104913309
CSF3	2	3	2	2	3	1	colony stimulating factor 1 receptor
LOC104914209	0	3	1	2	3	1	uncharacterized LOC104914209
LOC104909202	0	1	0	0	3	1	olfactory receptor 14C36-like
LOC104916741	1	1	2	3	3	1	sterile alpha motif domain-containing protein 14-like
CRTAM	1	1	3	0	3	1	cartilage acidic protein 1
LOC104911831	2	4	2	2	3	1	uncharacterized LOC104911831
LOC104910526	2	2	1	2	2	1	uncharacterized LOC104910526
LOC104915421	1	3	1	1	2	1	potassium channel subfamily K member 2
MNX1	1	2	3	1	2	1	motor neuron and pancreas homeobox 1
LOC104912074	3	2	2	2	2	1	fibroblast growth factor receptor 2-like
LOC104914449	0	2	2	4	2	1	selenium-binding protein 1-like
FOXJ1	1	1	1	3	2	1	forkhead box I3
LOC104913191	1	1	1	2	2	1	uncharacterized LOC104913191
SLC6A5							
	1	2	1	1	2	1	solute carrier family 6 (neurotransmitter transporter), member 5
GALNT6	3	2	1	3	2	1	polypeptide N-acetylgalactosaminyltransferase 5
LOC104911809	3	2	3	3	2	1	contactin-associated protein-like 5
PDZK1IP1	1	0	1	1	2	1	PDZK1 interacting protein 1
LOC100543473	5	3	2	4	2	1	sodium channel protein type 9 subunit alpha-like
LOC100538506							
	0	1	0	0	2	1	soluble scavenger receptor cysteine-rich domain-containing protein
	2	1	1	2	2	1	SSCSD-like
LOC104914555							
LOC104917213							
	2	3	0	2	2	1	leukocyte immunoglobulin-like receptor subfamily A member 6
ADCY8	1	3	4	3	2	1	adenylate cyclase 8 (brain)
MMP7	1	1	1	1	2	1	matrix metalloproteinase 7 (matrilysin, uterine)
HOXB9	2	1	0	0	2	1	homeobox B8
FAM222A	2	1	4	1	2	1	family with sequence similarity 221, member A
LOC104916969	0	3	1	1	2	1	uncharacterized LOC104916969
SLC15A1							
	0	1	1	1	2	1	solute carrier family 15 (oligopeptide transporter), member 1
LOC104915727	3	2	3	0	2	1	adenylyl cyclase-associated protein 1-like
LOC104911171	3	2	3	0	2	1	fibrous sheath-interacting protein 1-like
S100A12	1	0	3	1	1	1	S100 calcium binding protein A12
CCDC129	1	1	2	2	1	1	coiled-coil domain containing 127
LOC104912615	2	2	3	1	1	1	vitamin K-dependent protein C-like
LOC104912800	0	1	1	1	1	1	uncharacterized LOC104912800
LOC104912395	2	1	1	1	1	1	uncharacterized LOC104912395
LOC104910219	1	0	1	0	1	1	secretogogin
LOC100544625	1	1	1	0	1	1	septin-2
PAX1	2	1	1	3	1	1	paired box 1
LOC104916082							
	3	1	1	1	1	1	sodium/potassium-transporting ATPase subunit alpha-3-like
LOC104910523	1	4	2	1	1	1	uncharacterized LOC104910523
LOC104916767	1	1	1	1	1	1	uncharacterized LOC104916767
LOC100303707	0	0	0	0	1	1	glucagon receptor
IL10	1	1	1	2	1	1	IKAROS family zinc finger 5 (Pegasus)

MZB1	0	0	0	1	1	1	marginal zone B and B1 cell-specific protein
SLC5A5	5	1	1	2	1	1	solute carrier family 5 (sodium/iodide cotransporter), member 5
LOC100550016	2	2	2	1	1	1	protocadherin beta-15-like
LOC104909797	5	1	3	1	1	1	uncharacterized LOC104909797
FUT9	2	1	3	1	1	1	fucosyltransferase 8 (alpha (1,6) fucosyltransferase)
LOC100542440	1	0	1	1	1	1	uncharacterized LOC100542437
LOC104911423	0	1	1	1	1	1	uncharacterized protein C7orf63-like
C1HXorf22	0	1	0	1	1	1	chromosome 1 open reading frame, human C7orf60
TMPS56	0	0	1	1	1	1	transmembrane protease, serine 6
OTOP3	0	1	1	1	1	1	otopetrin 3
LOC100545469	2	1	1	0	1	1	semaphorin-3A
LRRC18	1	1	1	0	1	1	leucine rich repeat containing 18
LOC104909727	1	2	2	3	1	1	uncharacterized LOC104909727
SPDEF	0	1	0	1	1	1	SAM pointed domain containing ETS transcription factor
LOC104912848	1	0	0	1	1	1	uncharacterized LOC104912848
LOC104912194	2	1	1	1	1	1	uncharacterized LOC104912194
LOC104909473	0	1	0	1	1	1	uncharacterized LOC104909473
LOC104912702	1	0	2	0	1	1	uncharacterized LOC104912702
GRB7	1	0	0	0	1	1	growth factor receptor-bound protein 2
LOC104915237	1	0	0	0	1	1	endogenous retrovirus group K member 9 Pol protein-like
LOC104909828	2	2	0	3	1	1	proto-oncogene tyrosine-protein kinase ROS-like
LOC100546177	1	0	1	1	1	1	arylsulfatase D-like
LOC100550004	0	2	3	1	1	1	cyclin I family member 2
LOC104916103	1	2	0	1	1	1	phytanoyl-CoA hydroxylase-interacting protein
SPTSSB	0	0	0	1	1	1	serine palmitoyltransferase, small subunit B
RSPH1	1	1	1	1	1	1	radial spoke head 1 homolog (Chlamydomonas)
LOC104916562	1	0	1	1	1	1	kinesin-like protein KIF20B
LOC104909550	0	1	0	1	1	1	uncharacterized LOC104909550
CD8B	1	1	3	0	1	1	CD86 molecule
LOC104912570	0	1	1	0	1	1	uncharacterized LOC104912570
LOC104909348	1	1	1	0	1	1	myelin transcription factor 1
LOC104917406	1	0	1	0	1	1	uncharacterized LOC104917406
LOC104916414	0	0	1	0	1	1	run-related transcription factor 2 pseudogene
GPLD1	0	1	0	0	1	1	G patch domain and KOW motifs
CLDN18	1	1	1	0	1	1	claudin 16
LOC104917526	0	3	2	3	1	1	membrane-associated guanylate kinase, WW and PDZ domain-containing protein 2-like
OLFM4	0	1	1	3	1	1	olfactomedin 4
LOC104916117	1	1	3	1	1	1	homeobox protein Nkx-2.2-like
LOC100543851	0	0	1	1	1	1	thrombospondin type-1 domain-containing protein 4
LOC104909813	1	2	1	1	1	1	uncharacterized LOC104909813
LOC104916670	1	2	1	1	1	1	uncharacterized LOC104916670
LOC104912288	1	1	3	0	1	1	uncharacterized LOC104912288
LOC100550877	0	0	1	0	1	1	uncharacterized LOC100550877
MLANA	1	0	1	0	1	1	melan-A
LOC100543241	0	0	0	0	1	1	endothelial zinc finger protein induced by tumor necrosis factor alpha-like
LOC104913445	0	0	1	0	1	1	uncharacterized LOC104913445
LOC104915698	1	3	1	0	1	1	uncharacterized LOC104915698
LOC104910585	0	0	0	0	1	1	uncharacterized LOC104910585
CSMD1	1	0	0	0	1	1	c-src tyrosine kinase
PAICS	0	3	2	3	1	1	phosphoribosylaminoimidazole carboxylase, phosphoribosylaminoimidazole succinocarboxamide synthetase
LOC104910515	0	4	0	2	1	1	uncharacterized LOC104910515
LOC104910805	1	2	1	1	1	1	uncharacterized LOC104910805
DCDC1	1	1	2	1	1	1	discoidin, CUB and LCCL domain containing 2
LOC104916084	1	1	2	1	1	1	putative solute carrier family 22 member 31
LOC104915818	0	1	1	1	1	1	uncharacterized LOC104915818
CLDN23	1	0	1	0	1	1	claudin 20
TLX1	3	1	1	0	1	1	T-cell leukemia homeobox 1
CCNA1	1	0	0	0	1	1	cerebral cavernous malformation 2-like
LOC104913937	1	0	0	0	1	1	double C2-like domain-containing protein beta
LOC104916809	0	0	0	0	1	1	uncharacterized LOC104916809
SLC04C1	1	1	1	70	0	1	solute carrier organic anion transporter family, member 4C1
LOC100551007	2	5	2	3	0	1	pulmonary surfactant-associated protein A-like
LOC104912936	3	2	2	3	0	1	uncharacterized LOC104912936
LOC104917144	0	1	2	3	0	1	calphotin-like
LOC104917041	0	1	1	2	0	1	uncharacterized LOC104917041
LOC104913607	2	2	2	2	0	1	T-box transcription factor TBX5-like
LOC104910698	2	1	0	2	0	1	uncharacterized LOC104910698
LOC104914623	0	1	1	2	0	1	collagen alpha-1(II) chain-like
LOC100546322	3	2	2	2	0	1	voltage-dependent T-type calcium channel subunit alpha-1H-like
AVPR1A	2	2	2	1	0	1	arginine vasopressin receptor 1A
LOC104917396	1	1	0	1	0	1	uncharacterized LOC104917396
LOC104912294	1	1	1	1	0	1	uncharacterized LOC104912294
LOC104912717	0	1	1	1	0	1	uncharacterized LOC104912717

LOC104911676	1	2	2	1	0	1	uncharacterized LOC104911676
LOC100548929	2	1	1	1	0	1	DEP domain-containing mTOR-interacting protein-like
LOC104911741	1	0	0	1	0	1	solute carrier family 15 member 5-like
LOC104911606	0	0	1	1	0	1	uncharacterized LOC104911606
LOC100538662	2	1	0	1	0	1	scale keratin
LOC104916970	0	1	1	1	0	1	microtubule-associated serine/threonine-protein kinase 1-like
LOC104916045	0	1	0	1	0	1	uncharacterized LOC104916045
SHH	0	1	0	1	0	1	sonic hedgehog
LIX1	1	1	1	1	0	1	lipopolysaccharide-induced TNF factor
LOC104916627	1	0	0	1	0	1	3-keto-steroid reductase-like
LOC104910796	1	1	0	1	0	1	uncharacterized LOC104910796
LOC104917217	2	1	1	1	0	1	amyloid beta A4 precursor protein-binding family B member 3-like
LOC104914839	1	1	1	1	0	1	zinc finger protein 862-like
LOC104917519	1	2	2	1	0	1	membrane-associated guanylate kinase, WW and PDZ domain-containing protein 2-like
KCNK12	0	1	1	1	0	1	potassium channel, subfamily K, member 10
LOC104910240	1	0	1	1	0	1	CD226 antigen-like
LOC104913980	0	1	0	1	0	1	uncharacterized LOC104913980
LOC104909728	1	1	2	0	0	1	ensconsin-like
LOC104910047	1	1	1	0	0	1	uncharacterized LOC104910047
LOC100546894	0	0	0	0	0	1	TSC22 domain family protein 1-like
LOC100541954	0	0	0	0	0	1	cytochrome b561
GRP	1	1	2	0	0	1	glutamate receptor, metabotropic 8
LOC104913500	0	0	0	0	0	1	galanin receptor type 1-like
RNF222	1	0	0	0	0	1	ring finger protein 222
LOC104909412	0	0	1	0	0	1	unconventional myosin-VIIa
LOC104910124	0	1	0	0	0	1	uncharacterized LOC104910124
LOC104916708	0	0	0	0	0	1	free fatty acid receptor 2-like
LOC104915445	1	0	1	0	0	1	alcohol dehydrogenase 1-like
LOC104914179	1	1	1	0	0	1	uncharacterized LOC104914179
GBX1	1	0	0	0	0	1	globoside alpha-1,3-N-acetylgalactosaminyltransferase 1
LOC104910331	0	0	0	0	0	1	suppression of tumorigenicity 18 protein-like
LOC104909716	0	0	0	0	0	1	uncharacterized LOC104909716
LOC104910400	0	0	1	0	0	1	uncharacterized LOC104910400
LOC104916311	0	0	0	0	0	1	copine-8-like
FAM19A4	2	0	1	0	0	1	family with sequence similarity 19 (chemokine (C-C motif)-like), member A3
LOC104916171	0	1	0	0	0	1	E3 ubiquitin-protein ligase TRIM39-like
LOC104913688	1	1	0	0	0	1	uncharacterized LOC104913688
LOC104917561	1	1	0	0	0	1	uncharacterized LOC104917561
LOC104910442	1	1	2	0	0	1	uncharacterized LOC104910442
LOC100550949	2	1	2	0	0	1	regulating synaptic membrane exocytosis protein 2-like
LOC104917457	1	1	1	0	0	1	uncharacterized LOC104917457
TMPRSS9	1	1	1	0	0	1	transmembrane protease, serine 9
LOC104910555	0	0	1	0	0	1	uncharacterized LOC104910555
CUZD1	0	2	0	0	0	1	cut-like homeobox 2
LOC104916249	0	1	0	0	0	1	zinc finger protein PLAGL1-like
LOC104911944	0	0	0	0	0	1	uncharacterized LOC104911944
LOC104917291	0	0	0	0	0	1	uncharacterized LOC104917291
LOC104909737	0	0	0	0	0	1	uncharacterized LOC104909737
LOC104910308	0	0	0	0	0	1	suppression of tumorigenicity 18 protein-like
LOC104912390	1	0	0	0	0	1	tenascin-R-like
LOC100546734	0	0	0	0	0	1	angiopoietin-related protein 1-like
LOC104915218	1	0	0	0	0	1	uncharacterized LOC104915218
LOC100538984	0	0	0	0	0	1	complement C4-like
LOC100541261	0	0	0	0	0	1	galactose-3-O-sulfotransferase 2-like
LOC104910162	0	0	0	0	0	1	uncharacterized LOC104910162
LOC104910721	0	0	0	0	0	1	uncharacterized LOC104910721
LOC104913526	0	0	0	0	0	1	uncharacterized LOC104913526
LOC104913792	0	0	0	0	0	1	Na(+)/H(+) exchange regulatory cofactor NHE-RF3-like
LOC104914287	0	0	0	0	0	1	uncharacterized LOC104914287
LOC104916064	0	0	0	0	0	1	uncharacterized LOC104916064
LOC104917347	0	0	0	0	0	1	heparan-sulfate 6-O-sulfotransferase 2-like
NR1H4	0	0	0	0	0	1	nuclear receptor subfamily 1, group H, member 4
LOC104910825	87	38	73	3	107	1	uncharacterized LOC104910825
LRIT1	30	3	27	5	34	1	leucine-rich repeat, immunoglobulin-like and transmembrane domains 1
TBX19	4	2	5	1	8	1	T-box 19
BATF3	6	5	3	6	7	1	basic leucine zipper transcription factor, ATF-like 3
CACNA1I	2	1	0	5	6	1	calcium channel, voltage-dependent, T type, alpha 1G subunit
CDH17	3	2	5	2	6	1	cadherin 13
VSIG8	2	1	1	2	5	1	V-set and immunoglobulin domain containing 8
LOC104911132	3	1	2	2	5	1	uncharacterized LOC104911132
LOC104914153	10	4	2	4	5	1	protein kinase C zeta type-like
LOC100550029	3	2	2	1	4	1	p53 apoptosis effector related to PMP-22-like
LOC104909547	2	3	6	0	3	1	uncharacterized LOC104909547

LOC104911064	3	3	4	0	3	1	uncharacterized LOC104911064
LOC104909618	2	2	3	2	3	1	kinesin-like protein KIF28P
LOC104910111	2	1	0	1	3	1	uncharacterized LOC104910111
LOC104915038	0	2	3	2	3	1	endophilin-A1-like
GP9	5	2	0	7	3	1	glycoprotein V (platelet)
RGR	1	1	0	1	3	1	retinal G protein coupled receptor
CDCP2	6	2	1	1	3	1	CUB domain containing protein 1
LOC104917163	0	1	2	0	3	1	maestro heat-like repeat-containing protein family member 2B
LOC104910897	3	1	3	1	3	1	uncharacterized LOC104910897
FGFBP2	3	3	4	4	3	1	fibroblast growth factor binding protein 1
LOC104913378	3	2	1	1	2	1	uncharacterized LOC104913378
LOC104910713	0	1	1	1	2	1	uncharacterized LOC104910713
FGG	4	2	1	2	2	1	fibroblast growth factor receptor-like 1
LOC100541174	1	1	2	1	2	1	alpha-1-acid glycoprotein 2-like
FKBP6	1	1	0	1	2	1	FK506 binding protein 5
KSR2	1	2	0	1	2	1	kinase suppressor of ras 1
LOC104913005	2	2	3	1	2	1	putative inactive carboxylesterase 4
RBP4	0	1	1	0	2	1	retinol binding protein 4, plasma
FAT2	1	0	1	1	2	1	FAT atypical cadherin 1
LOC104916209	0	1	1	1	2	1	kallikrein-14-like
LOC100538582	2	0	1	0	2	1	lanosterol 14-alpha demethylase
LOC104914489	0	0	1	0	2	1	Fc fragment of IgA and IgM receptor
LOC104913368	1	0	1	1	2	1	uncharacterized LOC104913368
LOC100550436	3	0	0	1	2	1	T-cell surface glycoprotein CD8 alpha chain-like
LOC104914661	0	1	0	1	2	1	uncharacterized LOC104914661
LOC100541995	1	1	1	1	2	1	glutamate receptor ionotropic, NMDA 3B
DNAJB8	0	1	1	2	2	1	DnaJ (Hsp40) homolog, subfamily B, member 6
LOC104909540	0	0	1	1	2	1	uncharacterized LOC104909540
LOC100544584	1	3	1	4	1	1	actin, cytoplasmic 2-like
LOC104910640	0	0	0	0	1	1	uncharacterized LOC104910640
C6H7orf31	1	0	2	0	1	1	chromosome 6 open reading frame, human C7orf25
KNG1	1	1	2	3	1	1	kinase non-catalytic C-lobe domain (KIND) containing 1
LOC104913698	0	0	1	0	1	1	uncharacterized LOC104913698
LOC104913685	1	1	1	0	1	1	ly6/PLAUR domain-containing protein 1-like
LOC104910347	1	1	2	1	1	1	uncharacterized LOC104910347
LOC104910231	1	0	1	0	1	1	uncharacterized LOC104910231
DMRT3	2	0	0	0	1	1	doublesex and mab-3 related transcription factor 2
LOC100551192	2	2	1	2	1	1	group 10 secretory phospholipase A2-like
PHOX2B	2	1	2	1	1	1	paired-like homeobox 2b
LOC104909913	1	1	1	1	1	1	uncharacterized LOC104909913
LOC104913056	0	7	1	4	1	1	uncharacterized LOC104913056
LOC104912775	1	1	1	2	1	1	uncharacterized LOC104912775
LOC104911249	0	1	1	1	1	1	uncharacterized LOC104911249
LOC104910072	0	1	0	1	1	1	uncharacterized LOC104910072
LOC104913608	2	3	4	2	1	1	T-box transcription factor TBX5-like
LOC100550010	1	0	1	1	1	1	myelin transcription factor 1-like
LOC104916696	2	2	1	0	1	1	outer dense fiber protein 3-like
PCLO	1	2	3	3	1	1	piccolo (presynaptic cytomatrix protein)
FGF8	0	1	1	1	1	1	fibroblast growth factor 7
LOC100542192	1	2	3	3	1	1	neuropeptide Y receptor type 6-like
LOC104910102	2	2	1	2	1	1	uncharacterized LOC104910102
LOC104914851	0	0	1	0	1	1	uncharacterized LOC104914851
LOC104915394	1	1	1	2	1	1	epiplakin-like
LOC104910008	2	1	2	1	1	1	uncharacterized LOC104910008
LOC104909430	1	0	2	0	1	1	NAD(P)(+)-arginine ADP-ribosyltransferase 2-like
KCNC1	1	1	2	1	1	1	potassium voltage-gated channel, Shab-related subfamily, member 2
LOC104909549	1	1	0	0	1	1	uncharacterized LOC104909549
LOC104913869	1	1	0	0	1	1	uncharacterized LOC104913869
LOC100545478	0	1	0	0	1	1	histone H2A.Z
LOC104913132	1	1	0	0	1	1	uncharacterized LOC104913132
LOC104915011	0	0	0	0	1	1	uncharacterized LOC104915011
LOC104912147	1	0	0	0	1	1	uncharacterized LOC104912147
LOC104911060	1	0	0	0	1	1	secretoglobin family 1C member 1-like
LOC100539108	2	2	1	2	1	1	unconventional myosin-Va
MOS	1	1	1	2	1	1	v-mos Moloney murine sarcoma viral oncogene homolog
HAAO	1	1	1	1	1	1	hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)
LOC104913661	1	2	1	1	1	1	uncharacterized LOC104913661
KCNU1	1	1	2	0	1	1	potassium channel, subfamily T, member 1
LOC104916987	2	2	2	0	1	1	proto-oncogene c-Fos-like
SMAGP	1	1	1	0	1	1	small cell adhesion glycoprotein
LOC104912845	0	0	0	0	1	1	uncharacterized LOC104912845
LOC100547030	2	2	0	3	1	1	homeobox protein Nkx-2.5-like
LOC100539600	1	2	2	1	1	1	probable ATP-dependent RNA helicase DDX10
LOC104910067	1	1	1	1	1	1	protein eva-1 homolog C-like
LOC104909466	0	0	1	1	1	1	uncharacterized LOC104909466
LOC104913189	0	0	0	0	1	1	uncharacterized LOC104913189

RNF212	0	0	0	0	1	1	ring finger protein 212
LOC104912050	2	1	2	2	1	1	GDNF family receptor alpha-1-like
LOC104917011	6	1	3	2	1	1	uncharacterized LOC104917011
TSPAN19	1	2	3	2	1	1	tetraspanin 19
LOC104915469	0	1	1	1	1	1	uncharacterized LOC104915469
LOC104912729	1	1	1	1	1	1	uncharacterized LOC104912729
LOC100540918	1	1	1	1	1	1	E3 ubiquitin-protein ligase SMURF1
RASSF10							
	1	1	2	1	1	1	Ras association (RalGDS/AF-6) domain family (N-terminal) member 10
LOC104913331	1	1	1	1	1	1	putative E3 ubiquitin-protein ligase SH3RF2
LOC104912017	2	0	0	1	1	1	homeobox protein Nkx-2.2-like
LOC104909414	0	0	1	0	1	1	ubiquitin carboxyl-terminal hydrolase 38-like
NME4	0	0	0	0	1	1	NME/NM23 nucleoside diphosphate kinase 4
LOC104912189	0	0	0	0	1	1	uncharacterized LOC104912189
IMP G1	0	1	1	0	1	1	IMP (inosine 5'-monophosphate) dehydrogenase 2
LOC104912961	0	0	1	0	1	1	uncharacterized LOC104912961
LOC104912047	0	1	0	0	1	1	uncharacterized LOC104912047
LOC104910220	0	0	0	0	1	1	uncharacterized LOC104910220
LOC104916742	2	0	0	0	1	1	protein pygopus-like
HEP21	0	0	0	0	1	1	HEN1 methyltransferase homolog 1 (Arabidopsis)
FGA	4	1	0	4	0	1	free fatty acid receptor 4
LOC100538505	3	2	1	3	0	1	gasdermin-A2-like
THP2	1	1	1	3	0	1	beta-defensin 2
LOC104917201	0	1	1	2	0	1	chromosome unknown open reading frame, human C9orf24
RBM46	3	4	5	2	0	1	RNA binding motif protein 46
LOC100545184	0	2	0	2	0	1	glutamate receptor 1
ZBBX	3	1	2	2	0	1	zinc finger, B-box domain containing
LOC104912156	2	1	1	1	0	1	uncharacterized LOC104912156
LOC104913184	1	1	1	1	0	1	PHD finger protein 7-like
LOC104915582	0	1	0	1	0	1	uncharacterized LOC104915582
LOC104916007	0	0	1	1	0	1	keratin-associated protein 5-2-like
LOC100545010	1	1	4	1	0	1	histone H1-like
LOC100545586	1	1	1	1	0	1	aryl hydrocarbon receptor-like
CDH18	3	2	1	1	0	1	cadherin 17, LI cadherin (liver-intestine)
HEMGN	0	0	1	1	0	1	helicase with zinc finger 2, transcriptional coactivator
LOC100545885	2	0	0	1	0	1	alpha-fetoprotein
LOC104915451	0	0	1	1	0	1	uncharacterized LOC104915451
LOC104917130	0	1	3	1	0	1	uncharacterized LOC104917130
LOC100547642	0	1	2	1	0	1	sulfotransferase family cytosolic 1B member 1
C6	0	0	0	1	0	1	chromosome 5 open reading frame, human C15orf62
LOC104911933	0	1	1	1	0	1	uncharacterized LOC104911933
LOC104910637	1	2	3	1	0	1	uncharacterized LOC104910637
LOC104915408	0	0	0	1	0	1	deleted in malignant brain tumors 1 protein pseudogene
LOC100543157	0	0	0	1	0	1	solute carrier family 22 member 13-like
LOC104916300	1	1	1	1	0	1	tetratricopeptide repeat protein 9B-like
LOC104916282							
	1	1	4	1	0	1	1,25-dihydroxyvitamin D(3) 24-hydroxylase, mitochondrial-like
SLC26A6	0	1	1	1	0	1	solute carrier family 26 (anion exchanger), member 6
LOC104910070	0	0	0	1	0	1	uncharacterized LOC104910070
LOC104913830	0	0	1	1	0	1	uncharacterized LOC104913830
SUSD2	0	0	0	1	0	1	sushi domain containing 2
SI	0	0	0	1	0	1	sucrase-isomaltase (alpha-glucosidase)
PRR29	0	2	0	0	0	1	proline rich 29
FAM166A	1	1	0	0	0	1	family with sequence similarity 163, member B
LOC104914297	2	1	1	0	0	1	ephrin type-A receptor 7-like
TAT	0	1	0	0	0	1	tyrosine aminotransferase
CCKAR	1	1	0	0	0	1	cholecystokinin
LOC100543476	0	0	0	0	0	1	glutathione S-transferase omega-1-like
PHF21B	0	1	1	0	0	1	PHD finger protein 21B
LOC100550754	1	1	0	0	0	1	lysosomal acid lipase/cholesteryl ester hydrolase-like
LOC104911273	0	1	1	0	0	1	uncharacterized LOC104911273
LOC100545742	1	1	0	0	0	1	UAP56-interacting factor-like
LOC104917054	0	1	1	0	0	1	uncharacterized LOC104917054
CTRL	0	1	1	0	0	1	chymotrypsin C (caldecrin)
LOC104911230	1	0	1	0	0	1	uncharacterized LOC104911230
ESRP1	1	1	1	0	0	1	estrogen receptor 2 (ER beta)
LOC104914102	0	0	0	0	0	1	BPI fold-containing family B member 3-like
LOC104910581	2	1	1	0	0	1	uncharacterized LOC104910581
LOC104910164	1	0	1	0	0	1	uncharacterized LOC104910164
LOC104915028	1	1	2	0	0	1	uncharacterized LOC104915028
LOC104910703	2	0	1	0	0	1	uncharacterized LOC104910703
LOC100547129							
	0	0	1	0	0	1	PERQ amino acid-rich with GVF domain-containing protein 2
LOC104915491	0	0	0	0	0	1	uncharacterized LOC104915491
CLEC3A	1	26	1	0	0	1	C-type lectin domain family 19, member A
LOC104912373	0	0	0	0	0	1	sulfotransferase 6B1-like
DCST1	1	0	1	0	0	1	decapping enzyme, scavenger
LOC104916456	1	0	1	0	0	1	oligodendrocyte transcription factor 2
CTSE	0	0	1	0	0	1	cathepsin D

LOC104914221	1	0	1	0	0	1	uncharacterized LOC104914221
ZBP2	0	0	1	0	0	1	zona pellucida binding protein 2
LOC104912684	1	0	1	0	0	1	uncharacterized LOC104912684
LOC100542486	0	0	1	0	0	1	serine/threonine-protein kinase ATR-like
LOC104909940	1	0	1	0	0	1	uncharacterized LOC104909940
LOC104910292	0	0	1	0	0	1	uncharacterized LOC104910292
LOC104916643	0	1	0	0	0	1	uncharacterized LOC104916643
LOC100545232	1	1	0	0	0	1	folliculin-related protein 4-like
LOC104915468	1	0	0	0	0	1	secernin-3-like
NIPAL4	0	0	0	0	0	1	NIPA-like domain containing 4
GPA33	1	0	0	0	0	1	glycoprotein IX (platelet)
LOC104917489	0	0	0	0	0	1	uncharacterized LOC104917489
LOC104912289	0	0	0	0	0	1	uncharacterized LOC104912289
LOC104915065							
	0	0	0	0	0	1	transient receptor potential cation channel subfamily M member 3-like
LOC104916858	0	0	0	0	0	1	olfactory receptor 14A16-like
LOC104915989							
	1	0	0	0	0	1	voltage-dependent L-type calcium channel subunit alpha-1D-like
LHX4	1	0	0	0	0	1	LIM homeobox 3
CPLX4	0	0	0	0	0	1	complexin 3
DRD2	0	0	0	0	0	1	dopamine receptor D1
GPR78	0	0	0	0	0	1	G protein-coupled receptor 75
LOC100543622	0	0	0	0	0	1	transaldolase-like
LOC100543646	0	0	0	0	0	1	uncharacterized LOC100543639
LOC100545607	0	0	0	0	0	1	C-C motif chemokine 3-like
LOC100547855							
	0	0	0	0	0	1	serine/threonine-protein phosphatase 2A regulatory subunit B" subunit alpha
LOC100549201	0	0	0	0	0	1	RB transcriptional corepressor 1
LOC104910685	0	0	0	0	0	1	uncharacterized LOC104910685
LOC104911836	0	0	0	0	0	1	uncharacterized LOC104911836
LOC104912171	0	0	0	0	0	1	uncharacterized LOC104912171
LOC104913982	0	0	0	0	0	1	uncharacterized LOC104913982
LOC104916069	0	0	0	0	0	1	neuronal PAS domain-containing protein 4-like
LOC104916553	0	0	0	0	0	1	sulfotransferase family cytosolic 2B member 1-like
LOC104916713	0	0	0	0	0	1	integrin alpha-4-like
LOC104916735	0	0	0	0	0	1	macrophage receptor MARCO-like
LOC104915436	849	685	3	597	2102	0	ATP synthase subunit alpha, mitochondrial-like
LOC100548372	178	83	0	95	288	0	urotensin-2 receptor-like
LOC104916705	123	74	0	87	279	0	uncharacterized LOC104916705
LOC100543589	142	177	2	311	275	0	olfactory receptor 5AP2-like
LOC100550847	136	93	0	69	235	0	spindlin-W-like
KCMF1	114	61	0	62	228	0	kelch repeat and BTB (POZ) domain containing 8
LOC104915749	157	77	0	72	194	0	heterogeneous nuclear ribonucleoprotein K-like
LOC100303669	82	41	0	39	126	0	mitochondrial uncoupling protein 3
LOC104916902	84	38	0	42	126	0	uncharacterized LOC104916902
LOC104916789	55	27	0	28	110	0	uncharacterized LOC104916789
LOC104915925	68	37	0	29	94	0	spindle and kinetochore-associated protein 1-like
LOC104916829	50	30	0	28	82	0	nipped-B-like protein
LOC104915386	43	24	0	30	74	0	ubiquitin-associated protein 2-like
LOC104917138	41	19	1	15	65	0	uncharacterized LOC104917138
LOC104915974	37	18	0	24	51	0	uncharacterized LOC104915974
LOC104915551	23	14	0	19	48	0	ras GTPase-activating protein 1-like
LOC100544159	40	21	0	19	47	0	arylacetamide deacetylase-like 4
LOC104910193	18	12	0	12	42	0	mesoderm induction early response protein 3-like
LOC104916706	22	13	0	7	42	0	uncharacterized LOC104916706
LOC104916839	19	10	0	14	42	0	mesoderm induction early response protein 3-like
LOC104917185	41	10	0	10	39	0	uncharacterized LOC104917185
LOC100539846	17	9	0	1	39	0	embryonic pepsinogen
LOC104915190	19	12	0	11	35	0	chromodomain-helicase-DNA-binding protein 1-like
REC8	14	2	15	2	35	0	REC8 meiotic recombination protein
LOC100539580	25	12	0	10	30	0	anthrax toxin receptor 1-like
LOC104914735	18	8	0	20	29	0	E3 ubiquitin-protein ligase NEDD4-like
LOC100544628	17	11	0	10	25	0	arylacetamide deacetylase-like 4
LOC104916269	21	8	0	11	24	0	methyl-CpG-binding domain protein 2-like
LOC104916933	12	5	0	8	21	0	zinc finger RNA-binding protein-like
LOC104914844	18	9	0	8	21	0	NIPBL, cohesin loading facto
LOC104914843	8	7	0	7	18	0	nipped-B-like protein pseudogene
LOC104917252	12	4	0	3	18	0	nipped-B-like protein
LOC104915385	10	9	0	7	16	0	uncharacterized LOC104915385
LOC104916489	4	4	0	3	15	0	unconventional myosin-Vb-like
LOC104915564	10	8	0	8	14	0	zinc finger RNA-binding protein-like
LOC104915655	9	4	1	4	14	0	alpha-2-macroglobulin-like
SYT8	4	0	4	0	14	0	synaptotagmin VIII
LOC104915513	0	4	0	0	13	0	histone deacetylase 7-like
LOC104915675	9	4	0	6	13	0	uncharacterized LOC104915675
LOC104915384	4	3	1	2	12	0	ubiquitin-associated protein 2-like
LOC104917006	5	2	0	1	11	0	DNA replication complex GINS protein PSF2 pseudogene
LOC104917216	5	3	0	1	11	0	zinc finger RNA-binding protein-like
LOC104914913	5	5	0	2	9	0	zinc finger SWIM domain-containing protein 6-like

LOC104915879	6	7	0	7	9	0	activated RNA polymerase II transcriptional coactivator p15-like
LOC104915389	4	6	0	5	9	0	zinc finger SWIM domain-containing protein 6-like
LOC104916099	2	1	0	2	8	0	unconventional myosin-Vb-like
IBSP	1	0	0	6	6	0	IBA57, iron-sulfur cluster assembly homolog (S. cerevisiae)
GABRA6	1	2	2	4	6	0	gamma-aminobutyric acid (GABA) A receptor, alpha 5
PAPPA2	2	1	3	0	5	0	pappalysin 2
LOC104912913	3	2	3	2	5	0	uncharacterized LOC104912913
LOC104910813	2	3	4	1	5	0	zinc finger protein 501-like
LOC104910556	3	1	6	1	5	0	poly [ADP-ribose] polymerase 15-like
GNB3							
	4	1	2	2	5	0	guanine nucleotide binding protein (G protein), beta polypeptide 2-like 1
LOC100546371	3	2	0	4	4	0	argininosuccinate lyase
LOC104916151	2	1	0	1	4	0	uncharacterized LOC104916151
SLC1A1							
	3	2	1	3	4	0	solute carrier family 1 (neuronal/epithelial high affinity glutamate transporter, system Xag), member 1
LOC104910183	5	1	3	0	4	0	uncharacterized LOC104910183
LOC104912003	3	2	2	2	4	0	uncharacterized LOC104912003
SLC1A3							
	1	0	1	0	4	0	solute carrier family 1 (glial high affinity glutamate transporter), member 3
LOC104916488	4	3	0	0	4	0	unconventional myosin-Va-like
LOC104916586							
	0	0	0	0	4	0	maestro heat-like repeat-containing protein family member 2B
LOC104910819	4	1	1	2	4	0	uncharacterized LOC104910819
LOC104909744	2	0	3	1	3	0	synaptotagmin-like protein 3
TDRD5	2	1	2	1	3	0	tudor domain containing 5
LOC104914158	5	2	3	0	3	0	uncharacterized LOC104914158
LOC104913259	0	0	1	0	3	0	uncharacterized LOC104913259
LOC104912599	1	0	1	1	3	0	uncharacterized LOC104912599
LOC104915728	1	0	0	0	3	0	uncharacterized LOC104915728
LOC104912996	1	1	1	2	3	0	uncharacterized LOC104912996
GPR119	2	2	2	2	3	0	G protein-coupled receptor 116
LOC104912385	1	0	0	0	3	0	axonemal dynein light chain domain-containing protein 1
LOC104915852	6	3	0	1	3	0	murinoglobulin-2-like
LOC100544224	2	1	0	2	3	0	ESF1 homolog
P2RY4	0	1	1	0	3	0	pyrimidinergic receptor P2Y, G-protein coupled, 4
LOC104915725	7	1	9	5	3	0	mitochondrial ribosome-associated GTPase 1-like
LOC100540386	2	2	2	1	3	0	attractin
LOC104916753	1	1	0	0	3	0	uncharacterized LOC104916753
NOX5	1	2	1	1	3	0	NADPH oxidase, EF-hand calcium binding domain 5
LOC100548634	0	1	1	3	3	0	PH and SEC7 domain-containing protein 2-like
LOC104916737	1	1	3	1	3	0	class II histocompatibility antigen, B-L beta chain-like
SSTR3	2	1	1	0	3	0	somatostatin receptor 3
REN	4	3	1	2	3	0	renin
LOC104910714	1	1	2	1	2	0	uncharacterized LOC104910714
WDR63	0	0	0	0	2	0	WD repeat domain 63
LOC104916014	6	2	0	2	2	0	uncharacterized LOC104916014
LOC104909710	1	0	1	0	2	0	uncharacterized LOC104909710
CCDC78	1	2	3	2	2	0	coiled-coil domain containing 77
LOC104914311	1	0	1	0	2	0	P2Y purinoceptor 4-like
LOC104914608	3	1	1	2	2	0	SRC kinase signaling inhibitor 1-like
LOC100544693	1	1	4	1	2	0	late histone H2B.L4-like
LOC104911834	1	0	1	0	2	0	kynureninase-like
LOC104913889	1	0	0	0	2	0	uncharacterized LOC104913889
LOC104910302	2	3	3	0	2	0	uncharacterized LOC104910302
LOC104910880	1	1	0	2	2	0	uncharacterized LOC104910880
LOC104911564	1	0	0	2	2	0	uncharacterized LOC104911564
LOC104914822	3	2	3	1	2	0	PDZ domain-containing protein 2-like
LOC104913401	1	0	1	1	2	0	mesothelin-like protein
LOC104912020							
	0	1	1	2	2	0	solute carrier organic anion transporter family member 1A2-like
LOC104912531	4	0	4	1	2	0	carboxypeptidase N subunit 2-like
TH	1	0	1	0	2	0	tyrosine hydroxylase
KCNK18	0	0	1	0	2	0	potassium channel, subfamily K, member 16
LOC104915952	1	2	1	3	2	0	uncharacterized LOC104915952
LOC104911130	3	3	2	2	2	0	uncharacterized LOC104911130
MCTP1							
	1	1	1	2	2	0	multiple C2 and transmembrane domain-containing protein 1
LOC104909497	2	0	0	0	2	0	uncharacterized LOC104909497
LOC104914840	0	0	0	0	2	0	sperm flagellar protein 2-like
LOC104911428	2	2	2	2	2	0	synapsin-3-like
SIAH3	1	1	1	0	2	0	siha E3 ubiquitin protein ligase family member 3
LOC100539273	4	1	0	4	2	0	prostatic acid phosphatase-like
LOC104911281	0	2	2	2	2	0	uncharacterized LOC104911281
LOC104916119							
	2	0	1	1	2	0	sodium/potassium-transporting ATPase subunit alpha-3-like
LOC104915820	1	0	1	0	2	0	uncharacterized LOC104915820
LOC104911879	0	1	1	0	2	0	proline-rich acidic protein 1-like
LOC104914914	2	1	0	0	2	0	zinc finger SWIM domain-containing protein 6-like

LOC104915947	1	2	2	1	2	0	tetratricopeptide repeat protein 36-like
CABP7	2	2	2	1	2	0	calcium binding protein 4
HAS3	3	1	2	2	2	0	hyaluronan synthase 2
LOC104911223	1	1	2	1	2	0	uncharacterized LOC104911223
LOC104917555	2	1	2	0	2	0	uncharacterized LOC104917555
LOC104910319	0	0	0	2	2	0	uncharacterized LOC104910319
LOC100546113	1	0	1	0	2	0	glutamate receptor 1-like
LOC104912540	1	2	3	0	2	0	uncharacterized LOC104912540
LOC104914915	0	0	0	0	2	0	uncharacterized LOC104914915
LOC100550517	2	3	4	4	2	0	corticosteroid 11-beta-dehydrogenase isozyme 1-like
LOC104913207	3	0	1	0	2	0	uncharacterized LOC104913207
LOC104909542	0	1	1	1	2	0	uncharacterized LOC104909542
LOC104914870	0	0	2	1	2	0	uncharacterized LOC104914870
AAGNT	0	0	1	0	2	0	alpha-1,4-N-acetylglucosaminyltransferase
LOC104913611	0	0	1	0	2	0	uncharacterized LOC104913611
LOC104916887	2	2	0	0	2	0	E3 ubiquitin-protein ligase NEDD4-like
LOC104916403	1	2	2	2	2	0	UPF0500 protein C1orf216-like
LOC104914077	2	2	3	1	2	0	uncharacterized LOC104914077
LOC104915630							
	1	0	0	1	2	0	3 beta-hydroxysteroid dehydrogenase/Delta 5-->4-isomerase-like
LOC104912826	1	0	1	1	2	0	uncharacterized LOC104912826
LOC104913560							
	1	0	1	0	2	0	solute carrier family 2, facilitated glucose transporter member 11-like
LHX2	4	2	3	1	2	0	LIM homeobox 1
LOC104913829	2	1	1	1	2	0	CMRF35-like molecule 5
LOC104913050	0	0	0	1	2	0	uncharacterized LOC104913050
LOC104916633	0	1	0	0	2	0	estradiol 17-beta-dehydrogenase 2-like
LOC104912169	1	1	2	0	2	0	uncharacterized LOC104912169
LOC104913205	2	1	2	0	2	0	uncharacterized LOC104913205
VWA3B	2	1	2	2	2	0	von Willebrand factor A domain containing 3B
LOC104913505	1	0	1	0	2	0	zinc finger CCCH domain-containing protein 11A-like
OMP	1	0	1	1	2	0	olfactory marker protein
LOC100545353	3	0	2	1	2	0	myosin-7-like
LOC104916897	2	1	0	1	2	0	coiled-coil domain-containing protein 81-like
LOC104915129	0	4	2	1	2	0	uncharacterized LOC104915129
LOC104909976	1	0	1	1	2	0	thyroid peroxidase-like
NKX3-1	1	0	0	1	2	0	NK3 homeobox 1
LOC104909426	2	1	1	1	2	0	uncharacterized LOC104909426
LOC104910345	0	1	1	1	1	0	uncharacterized LOC104910345
LOC100542409	1	0	0	1	1	0	uncharacterized LOC100542409
TFAP2E							transcription factor AP-2 epsilon (activating enhancer binding protein 2 epsilon)
	2	1	0	1	1	0	
LOC104917022	2	2	1	1	1	0	uncharacterized LOC104917022
LOC104917480	0	0	0	0	1	0	uncharacterized LOC104917480
A1CF	0	0	1	0	1	0	APOBEC1 complementation factor
NKPD1	1	2	0	3	1	0	NTPase, KAP family P-loop domain containing 1
LOC100546662	0	1	1	2	1	0	caltractin-like
MLC1							
	1	1	1	1	1	0	megalencephalic leukoencephalopathy with subcortical cysts 1
GALR1	1	1	1	1	1	0	polypeptide N-acetylgalactosaminyltransferase 9
LOC100538528	1	0	1	1	1	0	desumoylating isopeptidase 2-like
LOC104912210	1	0	1	1	1	0	G-protein coupled receptor 12-like
LOC100543510	1	0	0	0	1	0	ankyrin repeat domain-containing protein 9-like
KCNJ1	3	0	1	0	1	0	Kv channel interacting protein 4
LOC104911984	1	1	1	0	1	0	uncharacterized LOC104911984
LOC104916819							
	1	0	0	0	1	0	maestro heat-like repeat-containing protein family member 2B
AP1S3	1	0	1	0	1	0	adaptor-related protein complex 1, sigma 3 subunit
KCNK3	4	3	6	2	1	0	potassium channel, subfamily K, member 2
LOC104909489	2	1	3	1	1	0	poly(A) polymerase gamma-like
AGXT	0	0	1	1	1	0	alanine-glyoxylate aminotransferase
WDR93	1	1	1	1	1	0	WD repeat domain 93
LOC104916004	1	0	1	0	1	0	uncharacterized LOC104916004
ADIRF	2	1	2	0	1	0	adipogenesis regulatory factor
LOC100538884	0	1	0	0	1	0	oxidation resistance protein 1
HTR1A	0	0	1	0	1	0	HIV-1 Tat specific factor 1
ARMC4	0	1	0	0	1	0	armadillo repeat containing 4
LOC104914355	0	1	1	0	1	0	complement receptor type 1-like
LOC104910020	0	0	1	0	1	0	uncharacterized LOC104910020
OTOS	1	0	0	0	1	0	otospiralin
LOC104915084	0	0	0	0	1	0	uncharacterized LOC104915084
LOC104914773	1	0	1	1	1	0	dynein intermediate chain 1, axonemal-like
CFAP221	0	0	0	1	1	0	cilia and flagella associated protein 20
SCTR	1	1	0	0	1	0	secretin receptor
LOC104910548	0	0	0	0	1	0	uncharacterized LOC104910548
LOC104917223	0	0	0	0	1	0	RANBP2-like and GRIP domain-containing protein 8
LOC100548118							
	1	0	1	0	1	0	erythroblast NAD(P)(+)-->arginine ADP-ribosyltransferase-like
LOC104915064	0	0	0	0	1	0	uncharacterized LOC104915064

ANXA10	0	0	2	2	1	0	annexin A10
LOC100538380	4	1	4	1	1	0	homeobox protein Hox-A1-like
LOC104909910	2	2	1	1	1	0	uncharacterized LOC104909910
LOC104914742	0	1	2	1	1	0	uncharacterized LOC104914742
LOC104913159	1	1	0	1	1	0	uncharacterized LOC104913159
SLC13A1	1	1	1	0	1	0	solute carrier family 13 (sodium/sulfate symporter), member 1
POU6F2	0	0	0	0	1	0	POU class 6 homeobox 2
LOC104917259	1	0	0	0	1	0	uncharacterized LOC104917259
LOC100539092	0	0	0	0	1	0	serine/threonine-protein kinase PDIK1L-like
LOC104912301	0	0	0	0	1	0	uncharacterized LOC104912301
LOC104914941	0	0	1	2	1	0	uncharacterized LOC104914941
LOC104912639	0	1	1	1	1	0	calsynenin-2-like
NEK10	1	1	2	1	1	0	NIMA-related kinase 10
LOC104910126	1	1	2	1	1	0	uncharacterized LOC104910126
LOC104910077	1	1	0	1	1	0	adenylate cyclase type 1-like
LOC104915614	0	0	0	1	1	0	interferon-like
LOC104916326	0	0	0	0	1	0	uncharacterized LOC104916326
LOC104909583	0	1	0	0	1	0	uncharacterized LOC104909583
LOC104910182	1	0	1	0	1	0	uncharacterized LOC104910182
LOC104916208	2	0	0	0	1	0	uncharacterized protein DDB_G0271670-like
PRPH2	0	0	1	0	1	0	peripherin 2 (retinal degeneration, slow)
LOC104912772	1	0	0	0	1	0	uncharacterized LOC104912772
FAM26F	0	2	2	1	1	0	family with sequence similarity 26, member E
LOC104910905	4	2	5	1	1	0	uncharacterized LOC104910905
LOC104915446	3	2	2	1	1	0	alcohol dehydrogenase 1-like
LOC104915662	0	2	0	1	1	0	olfactory receptor 14C36-like
LOC104910323	2	1	2	1	1	0	uncharacterized LOC104910323
LOC104912221	0	3	1	0	1	0	uncharacterized LOC104912221
SLC8A2	0	0	0	0	1	0	solute carrier family 8 (sodium/calcium exchanger), member 2
LOC104911556	1	0	1	0	1	0	uncharacterized LOC104911556
LOC104915590	2	1	2	0	1	0	histone-lysine N-methyltransferase 2B-like
LOC100548843	1	1	1	0	1	0	aldose reductase-like
LOC104912046	1	1	1	0	1	0	uncharacterized LOC104912046
LOC104916622	1	0	1	0	1	0	maestro heat-like repeat-containing protein family member 7
LOC100548577	0	1	1	3	1	0	mitochondrial peptide methionine sulfoxide reductase-like
LOC100539056	1	1	1	1	1	0	dual specificity protein phosphatase 13 isoform A-like
LOC100539852	2	1	1	1	1	0	stress-induced-phosphoprotein 1-like
LOC104911481	1	0	2	1	1	0	uncharacterized LOC104911481
LOC104911124	1	1	1	1	1	0	uncharacterized LOC104911124
LOC104913886	0	0	2	1	1	0	PHD finger protein 7-like
LOC104909571	1	2	0	1	1	0	uncharacterized LOC104909571
LOC100548321	0	1	1	1	1	0	olfactory receptor 14J1-like
LOC104915514	1	0	0	0	1	0	rac GTPase-activating protein 1-like
LOC104911387	2	0	0	0	1	0	glutamate decarboxylase 2-like
MLPH	0	0	0	0	1	0	melanophilin
LOC104914088	1	0	1	0	1	0	BPI fold-containing family B member 4-like
LOC104909649	2	1	3	0	1	0	uncharacterized LOC104909649
LOC104911712	2	1	1	0	1	0	sodium channel protein type 1 subunit alpha-like
LOC104909529	2	1	1	0	1	0	uncharacterized LOC104909529
LOC104910324	3	1	3	0	1	0	meprin A subunit beta-like
LOC104915298	0	1	2	0	1	0	uncharacterized LOC104915298
LOC104914507	0	1	1	0	1	0	apoptosis facilitator Bcl-2-like protein 14
LOC104910315	1	1	0	0	1	0	chloride channel protein C-like
LOC100548837	0	0	0	0	1	0	transmembrane O-methyltransferase
SHANK2	2	3	2	2	1	0	SH3 and multiple ankyrin repeat domains 2
LOC104917245	0	1	0	1	1	0	uncharacterized LOC104917245
LOC104915274	0	0	0	1	1	0	maestro heat-like repeat-containing protein family member 2B
LOC104909299	0	0	0	1	1	0	glutamate receptor ionotropic, delta-2-like
LOC104914934	0	1	5	1	1	0	interleukin-31 receptor subunit alpha-like
LOC104911510	1	1	1	0	1	0	uncharacterized LOC104911510
LOC104914791	1	0	0	0	1	0	protein unc-13 homolog B-like
LOC104911886	1	1	0	0	1	0	uncharacterized LOC104911886
LOC104910130	0	0	1	0	1	0	uncharacterized LOC104910130
LOC104916666	2	2	1	0	1	0	histone H3-like
RORB	0	0	1	0	1	0	RAR-related orphan receptor B
POU4F3	0	0	0	0	1	0	POU class 4 homeobox 3
LOC100540502	0	0	0	0	1	0	RNA-binding protein 14-like
LOC100541469	0	0	0	0	1	0	large neutral amino acids transporter small subunit 1-like
PLSCR5	0	1	1	2	1	0	phospholipid scramblase family, member 5
LOC104917148	2	1	1	1	1	0	uncharacterized LOC104917148
SLC6A11	1	1	1	1	1	0	solute carrier family 6 (neurotransmitter transporter), member 11
ACTRT2	1	0	1	1	1	0	actin-related protein T2
LOC104909640	3	1	3	1	1	0	uncharacterized LOC104909640
LOC104910839	1	2	2	1	1	0	uncharacterized LOC104910839

LOC104914481	2	1	1	1	1	0	complement receptor type 2-like
CRYAA	2	0	1	0	1	0	cryptochrome circadian clock 2
GDF7	1	0	1	0	1	0	growth differentiation factor 5
C28H1orf186	1	0	0	0	1	0	chromosome 28 open reading frame, human C1orf116
LGSN							
	0	0	0	0	1	0	leucine-rich repeat containing G protein-coupled receptor 6
F9	2	2	1	3	1	0	coagulation factor VIII, procoagulant component
B3GNT3							
	1	1	1	2	1	0	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 3
LOC104913261	1	0	0	1	1	0	pancreatic secretory trypsin inhibitor-like
LOC104912341	1	0	0	1	1	0	uncharacterized LOC104912341
TTR	1	0	1	1	1	0	transthyretin
LOC100541067	1	0	1	1	1	0	retinol dehydrogenase 8-like
LOC104909992	0	1	0	1	1	0	uncharacterized LOC104909992
LOC104911534	1	1	2	1	1	0	uncharacterized LOC104911534
LOC104911063	0	0	1	1	1	0	uncharacterized LOC104911063
RSPO4	2	1	1	1	1	0	R-spondin 4
LOC104910449	1	2	0	1	1	0	uncharacterized LOC104910449
LOC104914076	0	0	1	1	1	0	uncharacterized LOC104914076
LOC104911897	2	0	2	1	1	0	uncharacterized LOC104911897
LOC104914181	2	1	0	1	1	0	uncharacterized LOC104914181
LOC104917239	1	1	1	1	1	0	feather keratin Cos1-1/Cos1-3/Cos2-1-like
ANKRD33	0	0	1	1	1	0	ankyrin repeat domain 33
LOC100539248	1	0	1	1	1	0	Sjoegren syndrome nuclear autoantigen 1 homolog
LOC104912750	2	1	0	1	1	0	uncharacterized LOC104912750
KCNJ13							
	1	0	0	1	1	0	potassium inwardly-rectifying channel, subfamily J, member 12
LOC104911532	3	1	2	0	1	0	uncharacterized LOC104911532
LOC104909368	0	0	1	0	1	0	dynein heavy chain 8, axonemal-like
LOC104912055							
	0	1	1	0	1	0	phosphatidylinositol 4-phosphate 3-kinase C2 domain-containing subunit gamma-like
LOC104916878	1	1	0	0	1	0	alpha-2-macroglobulin-like protein 1
LOC100541205	0	0	0	0	1	0	glutamate decarboxylase 1
LOC104912875	0	0	0	0	1	0	uncharacterized LOC104912875
LOC104917563	0	0	0	0	1	0	uncharacterized LOC104917563
LOC104915480	0	0	0	0	1	0	olfactory receptor 14J1-like
ELF5							
	1	0	1	0	1	0	E74-like factor 3 (ets domain transcription factor, epithelial-specific)
LOC104913870	0	0	0	0	1	0	uncharacterized LOC104913870
DNMT	0	0	0	0	1	0	DNA (cytosine-5-)-methyltransferase 3 beta
LOC104911415	1	1	2	0	1	0	uncharacterized LOC104911415
LOC104915063							
	1	1	2	0	1	0	transient receptor potential cation channel subfamily M member 3-like
LOC104910334	1	1	1	0	1	0	uncharacterized LOC104910334
LOC100545500	0	0	0	0	1	0	potassium voltage-gated channel subfamily H member 7
LOC104910424	0	1	0	0	1	0	uncharacterized LOC104910424
LOC104917461							
	1	0	1	0	1	0	RNA-directed DNA polymerase from mobile element jockey-like
LOC104913586	3	0	2	0	1	0	uncharacterized LOC104913586
LOC104915922	0	0	1	0	1	0	cAMP-responsive element modulator-like
OFCC1	0	0	1	0	1	0	orofacial cleft 1 candidate 1
LOC104912250	0	0	0	0	1	0	bromodomain testis-specific protein-like
LOC104916938	0	0	0	0	1	0	putative protein TPRXL
LOC100544802	1	0	1	0	1	0	snRNA-activating protein complex subunit 5-like
LOC104911978	0	0	1	0	1	0	uncharacterized LOC104911978
LOC104909996	0	0	0	0	1	0	protein GREB1-like
LOC104915604	0	0	0	0	1	0	interferon-induced guanylate-binding protein 1-like
LOC104915220	0	0	1	0	1	0	putative HERV-K_Xq28 provirus ancestral Pol protein
LOC100539826	1	1	0	0	1	0	spermatogenesis-associated protein 6
LOC104911923	0	0	1	0	1	0	uncharacterized LOC104911923
SCGN	0	0	1	0	1	0	secretagogin, EF-hand calcium binding protein
LOC104912205	0	1	1	0	1	0	uncharacterized LOC104912205
LOC104917481	0	1	0	0	1	0	uncharacterized LOC104917481
LOC104917401	1	1	0	0	1	0	murinoglobulin-2-like
LOC104912226							
	0	0	0	0	1	0	RNA-directed DNA polymerase from mobile element jockey-like
LOC104909674	0	0	0	0	1	0	uncharacterized LOC104909674
LOC104913299	0	0	0	0	1	0	uncharacterized LOC104913299
LOC104910911	0	0	0	0	1	0	homeobox protein not2-like
LOC104913266	0	0	0	0	1	0	uncharacterized LOC104913266
LOC104916243	1	0	0	0	1	0	uncharacterized protein C19orf60 homolog
LOC104915568	0	0	0	0	1	0	uncharacterized LOC104915568
LOC104917055	0	0	0	0	1	0	nucleoporin-like protein 2
LOC104909512	1	0	0	0	1	0	uncharacterized LOC104909512
C19H9orf171	0	0	0	0	1	0	chromosome 19 open reading frame, human C9orf16
LOC100542770	0	0	0	0	1	0	chymotrypsin-like elastase family member 2A
LOC100549117	0	0	0	0	1	0	uncharacterized LOC100549117
LOC104910177	0	0	0	0	1	0	uncharacterized LOC104910177
LOC104911718	0	0	0	0	1	0	uncharacterized LOC104911718

LOC104915415	0	0	0	0	1	0	olfactory receptor 14C36-like
LOC104916893	3	3	1	3	1	0	uncharacterized LOC104916893
LOC104912272	2	2	1	1	1	0	uncharacterized LOC104912272
TRPV4							
	0	15	1	1	1	0	transient receptor potential cation channel, subfamily V, member 4
C1H12orf40	1	0	1	1	1	0	chromosome 1 open reading frame, human C12orf4
TEX36	0	0	1	1	1	0	testis expressed 36
IL17C	2	0	1	1	1	0	interleukin 17B
LOC104910976	1	0	2	1	1	0	uncharacterized LOC104910976
LOC104915984	0	0	0	1	1	0	G-protein coupled receptor 3-like
LOC100540945	0	0	0	1	1	0	death-associated protein kinase 2-like
CALB1	2	1	1	1	1	0	Ca++-dependent secretion activator 2
CCR9	0	0	0	1	1	0	chemokine (C-C motif) receptor 8
LOC104913262							
	0	0	2	1	1	0	double-headed protease inhibitor, submandibular gland-like
LOC104912318	1	0	0	1	1	0	uncharacterized LOC104912318
LOC104910695	0	1	1	1	1	0	collagen alpha-1(XV) chain-like
LOC104911646	0	0	1	1	1	0	uncharacterized LOC104911646
LOC104916722	2	1	0	1	1	0	PHD finger protein 7-like
LOC104911535	0	1	1	1	1	0	uncharacterized LOC104911535
LOC104912762	0	0	1	1	1	0	uncharacterized LOC104912762
TCTEX1D4	1	0	0	0	1	0	Tctex1 domain containing 4
LOC100545656	0	2	0	0	1	0	tubulin alpha-3 chain
LOC104915395	1	0	0	0	1	0	histone H4-like
LOC104917348	2	1	0	0	1	0	glycoprotein endo-alpha-1,2-mannosidase-like protein
LOC100547821	0	0	0	0	1	0	OX-2 membrane glycoprotein-like
LOC100540415	1	1	0	0	1	0	olfactory receptor 14A16-like
LOC100542689							
	0	0	0	0	1	0	protein-L-isoaspartate(D-aspartate) O-methyltransferase-like
LOC104909608	0	0	1	0	1	0	uncharacterized LOC104909608
OTOL1	2	0	1	0	1	0	otolin 1
LOC104917464	1	1	0	0	1	0	uncharacterized LOC104917464
LOC100549722	0	0	0	0	1	0	nebulette-like
LOC100546884	2	0	0	0	1	0	cytochrome P450 2W1-like
CD96	1	1	1	0	1	0	CD93 molecule
LOC104914539							
	0	1	0	0	1	0	signal peptide, CUB and EGF-like domain-containing protein 3
LOC104912317	1	1	0	0	1	0	potassium channel subfamily T member 2-like
LOC104914404	0	0	0	0	1	0	uncharacterized LOC104914404
LOC100541257	0	0	1	0	1	0	PCTP-like protein
LOC100541286	0	0	1	0	1	0	protein prenyltransferase alpha subunit repeat containing 1
LOC104909628	1	0	0	0	1	0	opsin-5-like
LOC104915799	1	0	0	0	1	0	uncharacterized LOC104915799
PROK2	1	0	0	0	1	0	prokineticin 2
SLC6A17							
	0	1	0	0	1	0	solute carrier family 6 (neutral amino acid transporter), member 17
LOC104911257	1	0	0	0	1	0	uncharacterized LOC104911257
LOC100540103	0	0	0	0	1	0	scale keratin-like
LOC104914245	0	0	0	0	1	0	uncharacterized LOC104914245
LOC100303705	0	0	0	0	1	0	uncharacterized LOC100303701
LOC104911533	2	1	2	0	1	0	uncharacterized LOC104911533
ELAVL2	0	0	1	0	1	0	ELAV like RNA binding protein 1
LOC100549814							
	0	0	1	0	1	0	high affinity cGMP-specific 3',5'-cyclic phosphodiesterase 9A
TMEM244	0	0	1	0	1	0	transmembrane protein 244
MEIG1	0	1	0	0	1	0	meiosis/spermiogenesis associated 1
CHRNA10	0	0	0	0	1	0	cholinergic receptor, nicotinic, alpha 1 (muscle)
LOC104915628	0	0	0	0	1	0	ladybird homeobox 1
LOC104916588	1	0	0	0	1	0	fibronectin-like
LOC104916745							
	0	0	0	0	1	0	leukocyte immunoglobulin-like receptor subfamily A member 2
LOC100546932	0	0	0	0	1	0	class I histocompatibility antigen, F10 alpha chain-like
LOC104911613	1	0	0	0	1	0	G2/M phase-specific E3 ubiquitin-protein ligase-like
LOC100549766	0	0	0	0	1	0	solute carrier family 22 member 2-like
LOC104910333	0	0	0	0	1	0	chloride channel protein B-like
LOC104910506	0	0	0	0	1	0	uncharacterized LOC104910506
LOC104913858	0	0	0	0	1	0	uncharacterized LOC104913858
SLC30A3	2	1	1	2	1	0	solute carrier family 30 (zinc transporter), member 3
LOC104914474	2	0	1	2	1	0	potassium voltage-gated channel subfamily D member 3
C5	0	2	1	2	1	0	chromosome 4 open reading frame, human C4orf50
CACNG3	2	1	1	1	1	0	calcium channel, voltage-dependent, gamma subunit 2
IL6	0	1	1	1	1	0	interleukin 5 receptor, alpha
LOC104911874	1	2	2	1	1	0	uncharacterized LOC104911874
LOC104913838	3	2	2	1	1	0	uncharacterized LOC104913838
LOC104910471	1	1	3	1	1	0	uncharacterized LOC104910471
C12H15orf43	1	1	1	1	1	0	chromosome 12 open reading frame, human C15orf40
DPYS	0	0	1	1	1	0	dpy-30 homolog (C. elegans)
LOC104911073	1	0	1	1	1	0	uncharacterized LOC104911073
LOC104912832	1	1	1	1	1	0	alpha-2-macroglobulin-like

GABRA5	0	2	0	1	1	0	gamma-aminobutyric acid (GABA) A receptor, alpha 4
LOC100544946	0	1	0	1	1	0	transmembrane protein 222-like
LOC104909773	1	1	2	1	1	0	protein THEMIS-like
LOC104914937	0	1	0	1	1	0	uncharacterized LOC104914937
LOC104911211	0	0	0	1	1	0	uncharacterized LOC104911211
GPR19	1	0	1	1	1	0	G protein-coupled receptor 182
FIBCD1	1	1	1	0	1	0	formin homology 2 domain containing 3
LOC104909781	0	1	0	0	1	0	uncharacterized LOC104909781
LOC104909327	1	1	0	0	1	0	ephrin type-A receptor 6
LOC104910389	1	0	0	0	1	0	uncharacterized LOC104910389
LOC104911222	1	0	1	0	1	0	uncharacterized LOC104911222
LOC104911686	0	0	3	0	1	0	uncharacterized LOC104911686
LOC104912679	1	0	2	0	1	0	uncharacterized LOC104912679
TRH	0	0	1	0	1	0	thyrotropin-releasing hormone
LOC104910631	0	0	1	0	1	0	uncharacterized LOC104910631
LOC104912063							phosphatidylinositol 4-phosphate 3-kinase C2 domain-containing subunit
	1	0	0	0	1	0	gamma-like
LOC104916253	0	0	1	0	1	0	copine-5-like
SPERT	0	0	1	0	1	0	spermatid associated
CHST8							
	0	0	1	0	1	0	carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 4
LOC104909679	0	0	0	0	1	0	uncharacterized LOC104909679
LOC100544984	0	0	0	0	1	0	G-protein coupled receptor 35-like
LOC104911426	1	1	0	0	1	0	uncharacterized LOC104911426
LOC104916244	0	0	0	0	1	0	protein MANBAL-like
LOC104911733	0	0	0	0	1	0	uncharacterized LOC104911733
HMX1	0	0	0	0	1	0	heme oxygenase (decycling) 2
LOC104912849	0	0	0	0	1	0	uncharacterized LOC104912849
LOC104917195	0	0	0	0	1	0	ranBP2-like and GRIP domain-containing protein 3
LOC104913710	0	0	0	0	1	0	cholesterol desaturase daf-36-like
LOC104910326	0	0	1	0	1	0	uncharacterized LOC104910326
LOC100542779	0	1	0	0	1	0	cell cycle control protein 50C-like
LOC104910325	0	0	0	0	1	0	meprin A subunit beta-like
LOC104915669	0	0	2	0	1	0	probable ATP-dependent RNA helicase DDX4
TFAP2A							transcription factor AP-2 alpha (activating enhancer binding protein 2
	0	1	2	0	1	0	alpha)
LOC100542525	2	1	1	0	1	0	glyoxylate reductase/hydroxypyruvate reductase-like
TMIE	0	0	1	0	1	0	transmembrane inner ear
LOC104913247	0	0	1	0	1	0	uncharacterized LOC104913247
CPA2	0	0	1	0	1	0	ceruloplasmin (ferroxidase)
LOC104912396	0	0	1	0	1	0	uncharacterized LOC104912396
LOC104913844	1	0	1	0	1	0	uncharacterized LOC104913844
LOC104915472	0	0	1	0	1	0	receptor tyrosine-protein kinase erbB-4-like
LOC104914938	0	1	0	0	1	0	uncharacterized LOC104914938
LOC100541603	0	0	0	0	1	0	hematopoietic prostaglandin D synthase-like
LOC104913181	0	0	0	0	1	0	uncharacterized LOC104913181
LOC104910898	1	0	0	0	1	0	T-cell surface glycoprotein CD8 alpha chain-like
LOC104916062	1	0	0	0	1	0	alpha-2-macroglobulin-like protein 1
ACER1	0	0	0	0	1	0	alkaline ceramidase 1
GPR39	0	0	0	0	1	0	G protein-coupled receptor 37 like 1
LOC100542222	0	0	0	0	1	0	attractin-like
LOC104910004	0	0	0	0	1	0	uncharacterized LOC104910004
LOC104911517	0	0	0	0	1	0	uncharacterized LOC104911517
LOC104912164	0	0	0	0	1	0	uncharacterized LOC104912164
LOC100538652	0	0	0	6	1	0	threo-3-hydroxyaspartate ammonia-lyase-like
CCL26	1	1	2	5	1	0	chemokine (C-C motif) ligand 24
LOC104912528	2	3	2	3	1	0	uncharacterized LOC104912528
LOC104913748	1	1	0	2	1	0	uncharacterized LOC104913748
LOC104917543	2	1	1	2	1	0	uncharacterized LOC104917543
LOC104913420	1	1	1	1	1	0	uncharacterized LOC104913420
LOC104914490	1	1	1	1	1	0	interleukin-20-like
GABRE	1	1	1	1	1	0	gamma-aminobutyric acid (GABA) A receptor, delta
LOC100546349	1	1	0	1	1	0	RNA-binding protein Nova-1-like
KCNH8							
	0	1	1	1	1	0	potassium voltage-gated channel, subfamily H (eag-related), member 6
LOC104912627	1	1	0	1	1	0	uncharacterized LOC104912627
HCN1	1	1	0	1	1	0	HCK proto-oncogene, Src family tyrosine kinase
LOC104916057	0	1	1	1	1	0	zinc finger protein ZIC 2-like
LOC104910050	0	1	0	1	1	0	uncharacterized LOC104910050
LOC104909765	1	2	1	1	1	0	uncharacterized LOC104909765
DNASE1L2	2	0	0	1	1	0	dynein, axonemal, light intermediate chain 1
LOC104912165	0	1	1	1	1	0	uncharacterized LOC104912165
LOC104913216	1	1	1	1	1	0	protocadherin alpha-5-like
LOC104913248	1	1	1	1	1	0	uncharacterized LOC104913248
LOC104911282	1	1	1	1	1	0	uncharacterized LOC104911282
LOC104909220	0	0	0	1	1	0	uncharacterized LOC104909220
LOC100543408	0	0	0	1	1	0	muscular LMNA-interacting protein-like
PKD1L2	0	1	0	1	1	0	polycystic kidney disease 1-like 2
PDILT	1	1	1	1	1	0	protein disulfide isomerase-like, testis expressed

OPN5	1	0	0	1	1	0	opsin 5
LOC100538374	1	0	0	1	1	0	synaptotagmin-2-binding protein-like
LOC104913303	0	0	2	1	1	0	short transient receptor potential channel 7-like
C1HXorf30	1	2	1	1	1	0	chromosome 1 open reading frame, human CXorf23
LOC100546519	1	1	1	1	1	0	serine/threonine-protein kinase Nek7-like
LOC104909259	1	0	1	1	1	0	protein decapentaplegic-like
LOC104911335	0	0	1	1	1	0	uncharacterized LOC104911335
CRHBP	4	2	0	1	1	0	corticotropin releasing hormone
LOC100548941	2	0	3	1	1	0	atrophin-1-like
LOC104913561							
	1	1	2	0	1	0	solute carrier family 2, facilitated glucose transporter member 11-like
LOC104915689	1	1	0	0	1	0	protocadherin alpha-13-like
LOC104910896	1	0	1	0	1	0	uncharacterized LOC104910896
LOC104913162	1	1	1	0	1	0	uncharacterized LOC104913162
LOC104911364	0	0	0	0	1	0	uncharacterized LOC104911364
LOC104915458							
	0	0	1	0	1	0	inositol 1,4,5-trisphosphate receptor-interacting protein-like 1
DRGX	0	0	1	0	1	0	developmentally regulated GTP binding protein 2
LOC104915322	1	0	0	0	1	0	uncharacterized LOC104915322
LOC104911324	1	0	1	0	1	0	uncharacterized LOC104911324
SOWAHA	2	1	1	0	1	0	sosondowah ankyrin repeat domain family member A
WNT7B	0	0	1	0	1	0	wingless-type MMTV integration site family, member 7B
RBP3	0	0	0	0	1	0	retinol binding protein 3, interstitial
DUSP18	1	0	0	0	1	0	dual specificity phosphatase 16
GC	0	0	0	0	1	0	gastrulation brain homeobox 1
LOC104911128	0	0	0	0	1	0	astacin-like metalloendopeptidase
KIAA1045	0	0	0	0	1	0	KIAA1033 ortholog
DND1	1	1	0	0	1	0	deoxyribonuclease II beta
C22H20orf195	0	0	0	0	1	0	chromosome 21 open reading frame, human C17orf97
LOC104915131	0	0	1	0	1	0	contactin-associated protein-like 4
LOC104909216	1	0	1	0	1	0	cytochrome P450 2J6-like
CD200R1	0	0	0	0	1	0	CD2 molecule
FOXF2	0	0	0	0	1	0	forkhead box F1
LOC100540643	0	0	1	0	1	0	neutral ceramidase
LOC100550646	0	1	1	0	1	0	vasoactive intestinal polypeptide receptor-like
LOC104909958	0	0	1	0	1	0	CUB and sushi domain-containing protein 1-like
LOC104916776	0	1	1	0	1	0	uncharacterized LOC104916776
LOC100545589	1	1	0	0	1	0	microsomal triglyceride transfer protein large subunit-like
LOC104910194	1	0	0	0	1	0	uncharacterized LOC104910194
LOC104913713							CMP-N-acetylneuraminase-beta-galactosamide-alpha-2,3-
	0	0	0	0	1	0	sialyltransferase 4-like
LOC104917308	1	0	0	0	1	0	DNA-directed RNA polymerase II subunit RPB2-like
LOC104909912	0	0	0	0	1	0	uncharacterized LOC104909912
LOC100539368	0	0	0	0	1	0	uncharacterized LOC100539365
CCDC138	3	0	2	0	1	0	coiled-coil domain containing 137
LOC104917071	1	0	1	0	1	0	acidic proline-rich protein PRP25-like
LOC104912690	0	0	1	0	1	0	uncharacterized LOC104912690
MYRFL	0	0	1	0	1	0	myelin regulatory factor-like
LOC104917154	0	0	1	0	1	0	uncharacterized LOC104917154
LOC104915634	0	0	1	0	1	0	transmembrane protease serine 4-like
LOC104909585	0	0	1	0	1	0	uncharacterized LOC104909585
LOC104911624	0	0	1	0	1	0	uncharacterized LOC104911624
LOC104912777	0	0	1	0	1	0	uncharacterized LOC104912777
LOC104912032	0	0	1	0	1	0	PHD finger protein 7-like
C4H4orf19	0	1	1	0	1	0	chromosome 4 open reading frame, human C4orf17
LOC104915778	1	1	1	0	1	0	uncharacterized LOC104915778
LOC104916736	0	1	0	0	1	0	uncharacterized LOC104916736
LOC104915390	1	0	0	0	1	0	endogenous retrovirus group K member 11 Pol protein-like
SNTN	1	0	0	0	1	0	sentan, cilia apical structure protein
LOC104913001	0	0	0	0	1	0	uncharacterized LOC104913001
LOC104910789	0	0	0	0	1	0	uncharacterized LOC104910789
LOC104914353	0	0	0	0	1	0	uncharacterized LOC104914353
LOC104917313	0	0	0	0	1	0	coiled-coil domain-containing protein 81-like
LOC104917390	0	0	0	0	1	0	uncharacterized LOC104917390
LOC104909569	0	0	0	0	1	0	uncharacterized LOC104909569
LOC104910461	0	0	0	0	1	0	lymphocyte antigen 6E-like
LOC104916447	0	0	0	0	1	0	cyclin-dependent kinase 12-like
LOC104910717	1	0	0	0	1	0	uncharacterized LOC104910717
LOC104914681	0	0	0	0	1	0	uncharacterized LOC104914681
BSX	0	0	0	0	1	0	bone marrow stromal cell antigen 1
CDHR1	0	0	0	0	1	0	cadherin 6, type 2, K-cadherin (fetal kidney)
LOC100547028	0	0	0	0	1	0	uncharacterized LOC100546995
LOC104909421	0	0	0	0	1	0	metabotropic glutamate receptor 5-like
LOC104910168	0	0	0	0	1	0	uncharacterized LOC104910168
LOC104913177	0	0	0	0	1	0	uncharacterized LOC104913177
LOC104917141							
	0	0	0	0	1	0	maestro heat-like repeat-containing protein family member 1
LOC104917399							
	0	0	0	0	1	0	T-cell-interacting, activating receptor on myeloid cells protein 1-like

NTRK1	0	0	0	0	1	0	neurotrophic tyrosine kinase, receptor, type 1
LOC100543615	2	0	0	6	0	0	transthyretin-like
LOC104916603	1	3	0	6	0	0	protein tyrosine phosphatase type IVA 2-like
LOC100538436	1	1	0	5	0	0	cytochrome P450 4B1-like
LOC100541326	2	1	0	4	0	0	dynein light chain 2, cytoplasmic-like
LOC104910878	0	0	0	4	0	0	keratin, type II cytoskeletal 6C-like
LOC104910877	1	0	0	3	0	0	keratin, type II cytoskeletal 3-like
LOC100544550	0	0	0	3	0	0	extracellular sulfatase Sulf-1-like
LOC104913017	0	2	1	2	0	0	solute carrier family 6 member 2
LOC100550599	0	1	1	2	0	0	probable G-protein coupled receptor 83
LOC104915521	0	2	0	2	0	0	uncharacterized LOC104915521
LOC104915375	0	1	1	2	0	0	putative histone-lysine N-methyltransferase PRDM6
LOC104916630	2	0	1	2	0	0	osteoclast-associated immunoglobulin-like receptor
LOC104917177	0	1	0	2	0	0	zinc finger protein 501-like
DSCAM	2	1	0	2	0	0	dystrophin related protein 2
LOC104916399	1	1	1	2	0	0	cytochrome P450 2C27-like
LOC104912397	0	1	3	2	0	0	uncharacterized LOC104912397
LOC104911184	1	1	1	2	0	0	uncharacterized LOC104911184
LOC104910522	0	1	2	1	0	0	uncharacterized LOC104910522
LOC104910820	1	1	1	1	0	0	uncharacterized LOC104910820
FABP6	1	1	2	1	0	0	fatty acid binding protein 3, muscle and heart
SH2D4B	2	1	0	1	0	0	SH2 domain containing 4B
LOC104910733	2	1	2	1	0	0	uncharacterized LOC104910733
LOC104911698	1	3	2	1	0	0	uncharacterized LOC104911698
GAREML	1	1	1	1	0	0	GRB2 associated, regulator of MAPK1
GIF	1	0	0	1	0	0	GID complex subunit 8
LOC104909342	0	0	0	1	0	0	scale keratin-like
LOC104914422	0	0	1	1	0	0	keratin-associated protein 10-7-like
LOC104910369							
	0	0	0	1	0	0	transient receptor potential cation channel subfamily A member 1-like
LOC104914071	0	0	0	1	0	0	uncharacterized LOC104914071
LOC100542256	1	0	0	1	0	0	protein-glutamine gamma-glutamyltransferase E-like
LOC100543038	1	0	1	1	0	0	potassium voltage-gated channel subfamily D member 2
SERPINB14	1	0	2	1	0	0	ovalbumin
LOC104917280	1	1	0	1	0	0	synaptobrevin homolog YKT6-like
LOC100541617	0	0	0	1	0	0	SERTA domain-containing protein 2-like
LOC100550424	2	6	4	1	0	0	uncharacterized LOC100550424
LOC100550719	0	0	0	1	0	0	feather keratin 4
LOC104909429	0	1	0	1	0	0	uncharacterized LOC104909429
GCM2	0	1	0	1	0	0	glial cells missing homolog 1 (Drosophila)
LOC104909815	1	0	0	1	0	0	proto-oncogene tyrosine-protein kinase ROS-like
LOC104916904							
	1	0	1	1	0	0	maestro heat-like repeat-containing protein family member 2B
LOC104910117	0	0	1	1	0	0	uncharacterized LOC104910117
LOC104910887	0	0	0	1	0	0	kyphoscoliosis peptidase-like
LOC104915806	0	0	0	1	0	0	uncharacterized LOC104915806
POU2AF1	1	0	1	1	0	0	POU class 2 associating factor 1
TRPM5							
	0	0	1	1	0	0	transient receptor potential cation channel, subfamily M, member 5
GLRA2	0	1	0	1	0	0	glycine receptor, alpha 1
LOC100541197							
	1	0	0	1	0	0	high affinity cAMP-specific 3',5'-cyclic phosphodiesterase 7A
LOC100550565	0	0	0	1	0	0	scale keratin
LOC104915177	0	0	0	1	0	0	uncharacterized LOC104915177
LOC104912935	0	1	0	1	0	0	uncharacterized LOC104912935
LOC104911153	0	0	1	1	0	0	uncharacterized LOC104911153
LOC104910536	0	1	0	1	0	0	uncharacterized LOC104910536
LOC104912867	0	0	0	1	0	0	pancreatic alpha-amylase-like
LOC104915508	2	1	2	1	0	0	protocadherin alpha-5-like
LOC104915504	0	1	0	1	0	0	MARVEL domain-containing protein 2-like
LOC104909422	0	0	1	1	0	0	metabotropic glutamate receptor 5-like
LOC100541166	0	1	0	1	0	0	junctophilin-3-like
GJB5	0	0	0	1	0	0	gap junction protein, beta 2, 26kDa
LOC104911068	0	1	1	1	0	0	uncharacterized LOC104911068
LOC104911917	0	1	1	1	0	0	uncharacterized LOC104911917
LOC104915657							
	0	0	0	1	0	0	maestro heat-like repeat-containing protein family member 1
LOC104917599	0	0	0	1	0	0	uncharacterized LOC104917599
LOC104917301	0	0	1	1	0	0	protocadherin beta-15-like
LOC104915890	0	0	0	1	0	0	uncharacterized LOC104915890
LOC104913151	1	0	2	1	0	0	uncharacterized LOC104913151
LOC100540933	0	0	0	1	0	0	extracellular sulfatase Sulf-2
LOC104912496	1	0	0	1	0	0	ankyrin-1-like
LOC104909627	0	0	0	1	0	0	uncharacterized LOC104909627
GRM2	1	0	0	1	0	0	glutamate receptor, metabotropic 1
LOC104915288	0	0	2	1	0	0	uncharacterized protein KIAA1958-like
LOC104912862	1	1	0	1	0	0	uncharacterized LOC104912862
LOC104915824	0	0	1	1	0	0	rho GTPase-activating protein 32-like
LOC104909933	0	1	0	1	0	0	rho GTPase-activating protein 32-like

AGR2	0	0	0	1	0	0	anterior gradient 2
LOC104912148	1	0	0	1	0	0	leucine-rich repeat-containing protein 32-like
EREG	1	1	1	1	0	0	excision repair cross-complementation group 8
LOC104913082	0	0	1	1	0	0	cadherin-1-like
LOC104915917	0	0	0	1	0	0	uncharacterized LOC104915917
LOC104916348	0	0	0	1	0	0	kinesin heavy chain isoform 5A-like
LOC104911860	0	0	0	1	0	0	uncharacterized LOC104911860
LOC104912200	3	0	4	1	0	0	heat shock transcription factor, X-linked-like
C12H15orf65	0	0	0	1	0	0	chromosome 12 open reading frame, human C15orf61
LOC104912537	0	0	0	1	0	0	uncharacterized LOC104912537
LOC104909803	1	0	0	1	0	0	uncharacterized LOC104909803
TMEM252	1	1	1	1	0	0	transmembrane protein 252
LOC104912393							
	0	0	0	1	0	0	maestro heat-like repeat-containing protein family member 6
LOC104912694	1	0	0	1	0	0	uncharacterized LOC104912694
LOC104910411	2	0	1	1	0	0	uncharacterized LOC104910411
LOC104917013	0	0	0	1	0	0	G-protein coupled receptor 98-like
LOC104912123	0	0	0	1	0	0	uncharacterized LOC104912123
SLC24A2							solute carrier family 24 (sodium/potassium/calcium exchanger), member 2
	0	1	1	1	0	0	
LAG3	0	1	0	1	0	0	ladinin 1
LOC104917244	1	0	0	1	0	0	free fatty acid receptor 3-like
NR1I3	0	1	1	1	0	0	nuclear receptor subfamily 1, group 1, member 3
LOC104916788	0	0	0	1	0	0	scale keratin-like
LOC104916560	0	0	0	1	0	0	scale keratin-like
LOC100542016	0	0	0	1	0	0	heterogeneous nuclear ribonucleoprotein L-like
LOC104916009	0	0	0	1	0	0	sperm mitochondrial-associated cysteine-rich protein-like
LOC100538591	1	1	1	1	0	0	cytochrome P450 4B1-like
LOC104915607	1	0	0	1	0	0	uncharacterized LOC104915607
CHRNA9	0	1	3	1	0	0	cholinergic receptor, nicotinic, alpha 6 (neuronal)
RELL2	0	0	0	1	0	0	RELT-like 2
LOC104915405	0	0	0	1	0	0	nuclear pore complex protein Nup98-Nup96-like
RNF186	1	0	0	1	0	0	ring finger protein 186
LOC100541600							
	0	0	0	1	0	0	T-cell-interacting, activating receptor on myeloid cells protein 1-like
LOC104912710	0	0	0	1	0	0	uncharacterized LOC104912710
LOC100541947							somatomedin-B and thrombospondin type-1 domain-containing protein-like
	0	1	0	1	0	0	
AMZ1	0	0	0	1	0	0	archaealysin family metalloproteinase 1
TAC1	0	0	1	1	0	0	tachykinin, precursor 1
MIOX	0	0	1	1	0	0	myo-inositol oxygenase
LOC104910804	1	0	0	1	0	0	uncharacterized LOC104910804
LOC104913233	0	0	0	1	0	0	uncharacterized LOC104913233
LOC104914519	0	0	1	1	0	0	uncharacterized LOC104914519
LOC100548153	1	0	0	1	0	0	IgGfC-binding protein-like
LOC104910458	2	0	1	1	0	0	uncharacterized LOC104910458
LOC100544636	0	1	1	1	0	0	NIPBL, cohesin loading factor
MIP	1	1	1	1	0	0	major intrinsic protein of lens fiber
LOC104916471	0	0	0	1	0	0	protein Wnt-1-like
LOC100550820	0	0	0	1	0	0	actin-1-like
LOC104910934	0	0	0	1	0	0	uncharacterized LOC104910934
RBPJL							recombination signal binding protein for immunoglobulin kappa J region-like
	1	1	0	1	0	0	
LOC104913702	1	0	1	1	0	0	uncharacterized LOC104913702
NPY1R	0	1	0	1	0	0	neuropeptide Y receptor Y1
MASP1							mannan-binding lectin serine peptidase 1 (C4/C2 activating component of Ra-reactive factor)
	0	1	1	1	0	0	
LOC104912960	0	0	1	1	0	0	uncharacterized LOC104912960
LOC104913043	2	1	0	1	0	0	uncharacterized LOC104913043
LOC104913868	0	0	1	1	0	0	uncharacterized LOC104913868
LOC104913630	0	0	0	1	0	0	uncharacterized LOC104913630
LOC104911031	2	1	1	0	0	0	uncharacterized LOC104911031
TFAP2D							transcription factor AP-2 delta (activating enhancer binding protein 2 delta)
	0	0	0	0	0	0	
LOC104914640	0	0	1	0	0	0	uncharacterized LOC104914640
LOC100542919	0	0	1	0	0	0	integrator complex subunit 3-like
LOC104912847	0	1	0	0	0	0	uncharacterized LOC104912847
LOC100541293	1	0	0	0	0	0	platelet glycoprotein VI-like
LOC104914316	0	0	0	0	0	0	ephrin type-A receptor 10-like
BRS3	1	0	1	0	0	0	bromodomain and PHD finger containing, 3
LOC104909778	0	1	0	0	0	0	uncharacterized LOC104909778
HHLA1	1	0	0	0	0	0	HHIP-like 2
LOC104916519	0	0	1	0	0	0	oxygen-regulated protein 1-like
LOC104911885	1	1	1	0	0	0	uncharacterized LOC104911885
LOC100546946	0	0	0	0	0	0	olfactory receptor 51A4-like
LOC104910340	1	0	0	0	0	0	glycine-rich protein DOT1-like
LOC100541793	0	0	0	0	0	0	protein TANC2
LOC104911566	0	0	0	0	0	0	uncharacterized LOC104911566
LOC104910089	0	0	1	0	0	0	uncharacterized LOC104910089

IFNG	0	0	0	0	0	0	interferon (alpha, beta and omega) receptor 2
LOC100545013	0	0	0	0	0	0	meprin A subunit beta
LOC100548527	0	0	0	0	0	0	breast cancer type 1 susceptibility protein homolog
LOC104912058	0	0	0	0	0	0	uncharacterized LOC104912058
LOC104917117	0	0	0	0	0	0	probable peroxisomal membrane protein PEX13
LOC104917178	1	1	0	0	0	0	feather keratin Cos1-1/Cos1-3/Cos2-1-like
LOC104912238	0	0	0	0	0	0	uncharacterized LOC104912238
FOXA1	1	0	0	0	0	0	FOS-like antigen 2
LOC104916379	1	0	0	0	0	0	insulin gene enhancer protein ISL-2-like
C3H8orf46	1	0	0	0	0	0	chromosome 3 open reading frame, human C8orf37
LOC104912292	0	0	0	0	0	0	uncharacterized LOC104912292
LOC104913296	0	0	0	0	0	0	uncharacterized LOC104913296
LOC104917298	2	0	0	0	0	0	uncharacterized LOC104917298
LOC104914055	0	0	0	0	0	0	myelin transcription factor 1-like
LOC100546239	0	0	0	0	0	0	cytosolic carboxypeptidase 1
LOC104910175	0	0	0	0	0	0	uncharacterized LOC104910175
LOC104910688	0	0	0	0	0	0	neuronal membrane glycoprotein M6A
LOC104915248	0	0	0	0	0	0	uncharacterized LOC104915248
LOC104915709	0	0	0	0	0	0	myosin-7-like
REP15	0	0	0	0	0	0	RAB15 effector protein
TSSK3	0	0	0	0	0	0	testis-specific serine kinase 3
CTRC	0	0	1	0	0	0	CTP synthase 2
LOC100548833	0	0	1	0	0	0	feather beta keratin-like
LOC104911617	0	1	0	0	0	0	uncharacterized LOC104911617
SCT	0	0	0	0	0	0	secretin
LOC104911265	1	0	0	0	0	0	uncharacterized LOC104911265
LOC104910184	0	0	0	0	0	0	uncharacterized LOC104910184
LOC104913697	0	0	0	0	0	0	uncharacterized LOC104913697
FBXO43	1	0	0	0	0	0	F-box protein 42
LOC104916130	1	0	0	0	0	0	alpha-2-macroglobulin-like
LOC104917325	0	0	0	0	0	0	probable vesicular acetylcholine transporter-B
CDRT1	2	0	0	0	0	0	cerebellar degeneration-related protein 2-like
LOC104913206	1	0	0	0	0	0	uncharacterized LOC104913206
LOC104913029	2	0	0	0	0	0	uncharacterized oxidoreductase C663.09c-like
LOC104917224	1	0	0	0	0	0	putative zinc finger protein 735
LOC100549666	0	0	0	0	0	0	class II histocompatibility antigen, M alpha chain-like
LOC104910022	0	0	0	0	0	0	fibrinogen-like protein 1
LOC104912732	0	0	0	0	0	0	uncharacterized LOC104912732
LOC104915528	0	0	0	0	0	0	uncharacterized transmembrane protein DDB_G0289901-like
LPO	0	0	0	0	0	0	lactoperoxidase
POMC	0	0	0	0	0	0	proopiomelanocortin
RS1	0	1	0	0	0	0	retinoschisin 1
LOC104911925	0	0	0	0	0	0	uncharacterized protein C10orf107-like
LPAR3	1	1	1	0	0	0	lysophosphatidic acid receptor 3
CHRNB3	0	0	1	0	0	0	cholinergic receptor, nicotinic, beta 2 (neuronal)
FABP2	0	0	1	0	0	0	fatty acid binding protein 1, liver
SH2D5	1	0	1	0	0	0	SH2 domain containing 5
TYRP1	0	0	1	0	0	0	tyrosinase-related protein 1
LOC100547871	0	0	0	0	0	0	fibulin-7-like
LOC100549857	0	0	0	0	0	0	serine palmitoyltransferase 1
DLX5	0	1	0	0	0	0	distal-less homeobox 1
LOC100545362	0	1	0	0	0	0	serine/threonine-protein kinase MRCK alpha-like
LOC104917615	0	1	0	0	0	0	glutamate receptor 4-like
LOC100543498	0	1	0	0	0	0	keratin, type I cytoskeletal 14
LOC104916857	0	0	0	0	0	0	homeobox protein OTX1-like
LOC100546941	0	0	0	0	0	0	phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit gamma isoform-like
LOC104915652	0	0	0	0	0	0	uncharacterized LOC104915652
LOC104913717	1	0	1	0	0	0	uncharacterized LOC104913717
LOC104916852	0	1	0	0	0	0	uncharacterized LOC104916852
LOC104913065	1	0	0	0	0	0	ovostatin-like
MGAT4C	0	1	1	0	0	0	MGAT4 family, member C
LOC100548108	1	0	1	0	0	0	syntaxin-binding protein 4-like
LOC104910237	0	0	1	0	0	0	uncharacterized LOC104910237
LOC104910540	1	1	0	0	0	0	uncharacterized LOC104910540
LOC104911726	0	0	0	0	0	0	uncharacterized LOC104911726
GPR141	1	0	0	0	0	0	G protein-coupled receptor 139
LOC104913758	1	0	0	0	0	0	uncharacterized LOC104913758
DCHS2	0	0	0	0	0	0	dachsous cadherin-related 1
LOC104914586	1	0	0	0	0	0	amiloride-sensitive amine oxidase [copper-containing]-like
LOC104910689	0	0	0	0	0	0	polypeptide N-acetylgalactosaminyltransferase-like 6
LOC104911576	0	0	0	0	0	0	uncharacterized LOC104911576
LOC104916658	1	0	1	0	0	0	maestro heat-like repeat-containing protein family member 2B
LOC104910900	0	1	0	0	0	0	uncharacterized LOC104910900
LOC104910632	1	0	0	0	0	0	uncharacterized LOC104910632
LOC104914545	0	0	0	0	0	0	acidic mammalian chitinase-like
LOC104911855	0	0	0	0	0	0	uncharacterized LOC104911855

LOC104915102	1	0	0	0	0	0	uncharacterized LOC104915102
LOC104911558	0	0	0	0	0	0	uncharacterized LOC104911558
LOC104910073	2	0	1	0	0	0	uncharacterized LOC104910073
CORT	1	0	1	0	0	0	coronin 7
LOC104914952	0	1	1	0	0	0	E3 ubiquitin-protein ligase Topors-like
LOC104912298	0	1	1	0	0	0	uncharacterized LOC104912298
LOC104915095	0	0	1	0	0	0	uncharacterized LOC104915095
LOC104917377	0	0	1	0	0	0	trypsin-1-like
LOC104912445	0	0	0	0	0	0	uncharacterized LOC104912445
XAF1	0	0	0	0	0	0	XIAP associated factor 1
INHBC	0	0	0	0	0	0	inhibin, beta B
LOC104916728	0	0	0	0	0	0	G-protein coupled receptor 42-like
LOC100546064	0	0	0	0	0	0	BPI fold-containing family 8 member 3-like
RIMS3	0	0	2	0	0	0	regulating synaptic membrane exocytosis 3
LOC104911122	0	0	1	0	0	0	cytosolic phospholipase A2 epsilon-like
LOC104913274	0	0	1	0	0	0	uncharacterized LOC104913274
LOC104909991	0	0	1	0	0	0	uncharacterized LOC104909991
LOC104913478	2	1	1	0	0	0	protein disulfide-isomerase A2-like
LOC104911912	0	1	0	0	0	0	uncharacterized LOC104911912
C1H21orf140	1	0	0	0	0	0	chromosome 1 open reading frame, human C12orf75
LOC104913614	1	0	0	0	0	0	uncharacterized LOC104913614
LOC100550169	0	0	0	0	0	0	chondroitin sulfate synthase 3
LOC104917246							
	0	0	0	0	0	0	leukocyte immunoglobulin-like receptor subfamily A member 2
LOC100540170	0	0	0	0	0	0	tubulin alpha-1A chain-like
LOC104910517	0	0	0	0	0	0	uncharacterized LOC104910517
LOC104910716	0	0	0	0	0	0	uncharacterized LOC104910716
LOC104917140							
	0	0	0	0	0	0	maestro heat-like repeat-containing protein family member 2B
LOC104909462	1	1	1	0	0	0	uncharacterized LOC104909462
HOXA13	0	1	1	0	0	0	homeobox A11
LOC104912857	0	0	1	0	0	0	uncharacterized LOC104912857
IL12B	1	0	1	0	0	0	interleukin 12A
CCDC122	0	0	0	0	0	0	coiled-coil domain containing 12
LOC104916364	0	0	0	0	0	0	protein Wnt-1
SNPH	1	0	0	0	0	0	syntrophin
LOC104913078							
	0	0	0	0	0	0	transient receptor potential cation channel subfamily V member 6-like
LOC100540781	0	0	0	0	0	0	protein kinase C-binding protein 1
LOC104911495	0	0	0	0	0	0	uncharacterized LOC104911495
LOC104916391	0	0	0	0	0	0	retinal guanylyl cyclase 1-like
C1H3orf30	1	1	1	0	0	0	chromosome 1 open reading frame, human C3orf17
LOC100541369	0	1	1	0	0	0	origin recognition complex subunit 1
CHRM2							
							CHRNA7 (cholinergic receptor, nicotinic, alpha 7, exons 5-10) and FAM7A
	0	0	1	0	0	0	(family with sequence similarity 7A, exons A-E) fusion
DAZL	0	0	1	0	0	0	DAZ associated protein 2
PROK1	2	0	1	0	0	0	prokineticin 1
LOC104912558	0	0	1	0	0	0	uncharacterized LOC104912558
AGR3	0	0	0	0	0	0	anterior gradient 3
FAM221A	0	0	0	0	0	0	family with sequence similarity 21, member C
LOC100549271	0	0	0	0	0	0	aldehyde oxidase 2-like
LOC104912522	0	0	0	0	0	0	uncharacterized LOC104912522
LOC104916587	0	0	0	0	0	0	trypsin I-P1-like
SLC9A4							solute carrier family 9, subfamily A (NHE4, cation proton antiporter 4), member 4
	0	0	0	0	0	0	
LOC104910090	1	0	2	0	0	0	uncharacterized LOC104910090
LOC104914268	0	0	2	0	0	0	uncharacterized LOC104914268
LOC104911788	1	1	1	0	0	0	uncharacterized LOC104911788
NMBR	0	0	1	0	0	0	neuromedin B receptor
PIFO	0	0	1	0	0	0	primary cilia formation
LOC104916694	0	0	1	0	0	0	lysine-specific demethylase 3B-like
LOC104910844	0	0	1	0	0	0	uncharacterized LOC104910844
LOC104911416	0	0	1	0	0	0	uncharacterized LOC104911416
LOC100541687	1	1	1	0	0	0	uncharacterized LOC100541679
LOC104912944	0	0	1	0	0	0	uncharacterized LOC104912944
LOC104916710	0	0	1	0	0	0	uncharacterized LOC104916710
LOC104910402	1	1	0	0	0	0	uncharacterized LOC104910402
LOC104910007	0	0	0	0	0	0	uncharacterized LOC104910007
LOC104915305							
	0	0	0	0	0	0	cAMP-dependent protein kinase catalytic subunit alpha-like
FAM155A	0	0	0	0	0	0	family with sequence similarity 154, member B
CPO	0	0	0	0	0	0	copine family member IX
LOC100538367	1	0	0	0	0	0	paraspeckle component 1-like
OC90	0	0	0	0	0	0	otoconin 90
LOC104913231	0	0	0	0	0	0	uncharacterized LOC104913231
LOC104910582	0	0	0	0	0	0	uncharacterized LOC104910582
LOC104912266	0	0	0	0	0	0	uncharacterized LOC104912266
LOC104910649	0	0	0	0	0	0	neuromedin-K receptor-like

LOC104910088	0	0	0	0	0	0	uncharacterized LOC104910088
ANKRD22	0	0	0	0	0	0	ankyrin repeat domain 22
LOC104915104	0	0	0	0	0	0	uncharacterized LOC104915104
SLC5A10							
	0	0	0	0	0	0	solute carrier family 5 (sodium/sugar cotransporter), member 10
LOC104909714	1	0	0	0	0	0	uncharacterized LOC104909714
CELF4	1	0	0	0	0	0	CUGBP, Elav-like family member 2
LOC104916798							
	1	0	0	0	0	0	transmembrane and coiled-coil domain-containing protein 5B-like
ABCG8	0	0	0	0	0	0	ATP-binding cassette, sub-family G (WHITE), member 8
BSND	0	0	0	0	0	0	bassoon presynaptic cytomatrix protein
CRYBA2	0	0	0	0	0	0	crystallin, beta A1
LOC100543283	0	0	0	0	0	0	histone H2B 1/2/3/4/6
LOC100543329	0	0	0	0	0	0	mitochondrial ubiquitin ligase activator of nfkb 1-A-like
LOC100550830	0	0	0	0	0	0	twist-related protein 2-like
LOC104910094	0	0	0	0	0	0	uncharacterized LOC104910094
LOC104910109	0	0	0	0	0	0	uncharacterized LOC104910109
LOC104911191	0	0	0	0	0	0	tetratricopeptide repeat domain 6
LOC104912705	0	0	0	0	0	0	uncharacterized LOC104912705
LOC104914022	0	0	0	0	0	0	uncharacterized LOC104914022
LOC104915680	0	0	0	0	0	0	homeobox protein otx5-like
SRRM3	0	0	0	0	0	0	serine/arginine repetitive matrix 3
SAMD7	0	2	3	0	0	0	sterile alpha motif domain containing 7
HOXD11	0	1	1	0	0	0	homeobox D10
ALX3	0	1	1	0	0	0	ALX homeobox 3
LOC104914086	0	0	1	0	0	0	uncharacterized LOC104914086
LOC104912674	1	1	1	0	0	0	uncharacterized LOC104912674
SST	0	0	1	0	0	0	somatostatin
LOC100545276	1	1	1	0	0	0	macrophage mannose receptor 1-like
LOC104914458	0	0	1	0	0	0	uncharacterized LOC104914458
LOC100545729	0	1	1	0	0	0	interferon regulatory factor 2-like
LOC100543260							
	1	0	1	0	0	0	phosphoribosyltransferase domain-containing protein 1-like
KCN51	2	2	1	0	0	0	potassium channel regulator
TMEM72	0	0	1	0	0	0	transmembrane protein 72
LOC100545430	0	0	1	0	0	0	aryl hydrocarbon receptor-like
LOC100550316	0	0	1	0	0	0	homeobox protein box-5-like
CAPZA3	0	0	1	0	0	0	capping protein (actin filament) muscle Z-line, alpha 2
UNC93A	0	0	1	0	0	0	unc-93 homolog A (C. elegans)
LOC100538613	0	0	1	0	0	0	transmembrane protein 8B
LOC104909974	0	0	1	0	0	0	uncharacterized LOC104909974
LOC104910788	0	0	1	0	0	0	uncharacterized LOC104910788
LOC104916570	0	0	1	0	0	0	olfactory receptor ZAP1-like
DNAH14	0	2	0	0	0	0	dynein, axonemal, heavy chain 12
LOC104916714	0	1	0	0	0	0	AT-rich interactive domain-containing protein 1A-like
ANKEF1	1	1	0	0	0	0	ankyrin repeat and EF-hand domain containing 1
LOC104909908	0	0	0	0	0	0	uncharacterized LOC104909908
SIGIRR							
	0	0	0	0	0	0	single immunoglobulin and toll-interleukin 1 receptor (TIR) domain
AQP8	1	0	0	0	0	0	aquaporin 8
LOC100548375	1	0	0	0	0	0	ubiquitin-conjugating enzyme E2 R2-like
LOC104911433	0	0	0	0	0	0	uncharacterized LOC104911433
LOC104913836	1	0	0	0	0	0	uncharacterized LOC104913836
LOC104910720	0	0	0	0	0	0	uncharacterized LOC104910720
LOC104911866	0	0	0	0	0	0	uncharacterized LOC104911866
LOC104910700	0	0	0	0	0	0	uncharacterized LOC104910700
LOC100549091	0	0	0	0	0	0	molybdopterin synthase catalytic subunit-like
LOC104910363	0	0	0	0	0	0	uncharacterized LOC104910363
CLDN16	0	0	0	0	0	0	claudin 14
LOC104909705	0	0	0	0	0	0	plectin-like
LOC104910722	0	0	0	0	0	0	uncharacterized LOC104910722
FGF3	0	0	0	0	0	0	fibroblast growth factor 23
LOC104912352	0	0	0	0	0	0	uncharacterized LOC104912352
NPYSR	0	0	0	0	0	0	neuropeptide Y receptor Y5
FEV	2	0	0	0	0	0	fetuin B
LOC104914658	1	0	0	0	0	0	CUGBP, Elav-like family member 5
LOC104911136	1	0	0	0	0	0	uncharacterized LOC104911136
LOC104915864	0	0	0	0	0	0	uncharacterized LOC104915864
BTG4	0	0	0	0	0	0	BTG family, member 2
C3H7orf72	0	0	0	0	0	0	chromosome 3 open reading frame, human C7orf57
GRM1	0	0	0	0	0	0	G protein-coupled receptor kinase 7
LOC100540275	0	0	0	0	0	0	40S ribosomal protein S6 pseudogene
LOC100550402	0	0	0	0	0	0	olfactory receptor 151-like
LOC104910045	0	0	0	0	0	0	serotriffin-like
LOC104910051	0	0	0	0	0	0	transcription factor GATA-4-like
LOC104911320	0	0	0	0	0	0	uncharacterized LOC104911320
LOC104911985	0	0	0	0	0	0	uncharacterized LOC104911985
LOC104912022							
	0	0	0	0	0	0	solute carrier organic anion transporter family member 1C1-like

LOC104912947	0	0	0	0	0	0	uncharacterized LOC104912947
LOC104914211	0	0	0	0	0	0	phospholipase A2, membrane associated-like
LOC104914414	0	0	0	0	0	0	uncharacterized LOC104914414
LOC104917490	0	0	0	0	0	0	uncharacterized LOC104917490
ONECUT3	0	0	0	0	0	0	one cut homeobox 3
PRR35	0	0	0	0	0	0	proline rich 35
RIPPLY3	0	0	0	0	0	0	rippy transcriptional repressor 3
PLEK2	1	0	2	0	0	0	pleckstrin 2
LOC104910436	0	0	2	0	0	0	regulating synaptic membrane exocytosis protein 2-like
SLC5A12							solute carrier family 5 (sodium/monocarboxylate cotransporter), member 12
LOC104915751	1	1	2	0	0	0	uncharacterized LOC104915751
GYS2	1	0	1	0	0	0	glycophorin C (Gerbich blood group)
LOC100541206	0	0	1	0	0	0	zinc finger protein ZIC 4-like
LOC104909951	1	1	1	0	0	0	uncharacterized LOC104909951
FAM83F	0	1	1	0	0	0	family with sequence similarity 83, member C
LOC104917231	1	0	1	0	0	0	uncharacterized LOC104917231
DDX43	1	0	1	0	0	0	DEAD (Asp-Glu-Ala-Asp) box helicase 42
EN2	0	0	1	0	0	0	engrailed homeobox 1
LOC104910662	0	1	1	0	0	0	uncharacterized LOC104910662
LOC100547060	0	0	1	0	0	0	probable global transcription activator SNF2L2
LOC100543523	0	1	1	0	0	0	uncharacterized LOC100543510
LOC104915805	0	0	1	0	0	0	P2Y purinoceptor 3-like
PCK1	0	0	1	0	0	0	phosphoenolpyruvate carboxykinase 1 (soluble)
FAM83G	0	0	1	0	0	0	family with sequence similarity 83, member F
KCNA10							potassium voltage-gated channel, shaker-related subfamily, member 1
LOC100545236	0	0	1	0	0	0	(episodic ataxia with myokymia)
BPIFB6	0	1	1	0	0	0	carbonic anhydrase 15-like
HCN4							BPI fold containing family B, member 6
	1	0	1	0	0	0	hyperpolarization activated cyclic nucleotide-gated potassium channel 2
PAX2	0	0	1	0	0	0	paired box 2
LOC104916814	0	0	1	0	0	0	uncharacterized LOC104916814
LOC100543469	1	1	0	0	0	0	cytosolic 5'-nucleotidase 1A-like
NCAN	0	1	0	0	0	0	neurocan
LOC104911666	0	0	0	0	0	0	uncharacterized LOC104911666
LOC100548026	0	0	0	0	0	0	sentrin-specific protease 6-like
LOC104917510	0	0	0	0	0	0	uncharacterized LOC104917510
PIGR	0	0	0	0	0	0	polymeric immunoglobulin receptor
LOC100545251	1	0	0	0	0	0	transmembrane protein 132E-like
LOC104916359	0	0	0	0	0	0	monocarboxylate transporter 13-like
LOC100544684	0	0	0	0	0	0	zinc metalloproteinase STE24
ATP4B	0	0	0	0	0	0	ATPase, H+/K+ exchanging, beta polypeptide
LOC100544750	0	0	0	0	0	0	epidermal growth factor receptor kinase substrate 8-like
LOC104915619	1	0	0	0	0	0	adenylate cyclase type 10-like
LOC104914962	0	0	0	0	0	0	uncharacterized LOC104914962
LOC104911934	1	0	0	0	0	0	steroidogenic acute regulatory protein, mitochondrial-like
EVX2	1	0	0	0	0	0	even-skipped homeobox 1
FEZF2	0	0	0	0	0	0	FEZ family zinc finger 1
SLC10A2							
	0	0	0	0	0	0	solute carrier family 10 (sodium/bile acid cotransporter), member 2
LOC104911062	0	0	0	0	0	0	uncharacterized LOC104911062
LOC104915588	0	0	0	0	0	0	6-methylsalicylic acid synthase-like
LOC104911322	1	0	0	0	0	0	uncharacterized LOC104911322
SPEF2	0	0	0	0	0	0	sperm flagellar 2
ISX	0	0	0	0	0	0	increased sodium tolerance 1 homolog (yeast)
LOC100540100	0	0	0	0	0	0	scaffold attachment factor B1-like
LOC100542043	0	0	0	0	0	0	vacuolar protein sorting-associated protein 13D
LOC100549616	0	0	0	0	0	0	transmembrane protein 68-like
LOC100550909	0	0	0	0	0	0	lipase member M-like
LOC100551343	0	0	0	0	0	0	uncharacterized LOC100551343
LOC104909953	0	0	0	0	0	0	protein eyes shut homolog
LOC104910520	0	0	0	0	0	0	uncharacterized LOC104910520
LOC104911084	0	0	0	0	0	0	cytosolic phospholipase A2 epsilon-like
LOC104911660	0	0	0	0	0	0	uncharacterized LOC104911660
LOC104913367							
	0	0	0	0	0	0	lipopolysaccharide-induced tumor necrosis factor-alpha factor homolog
LOC104913928	0	0	0	0	0	0	uncharacterized LOC104913928
LOC104914110	0	0	0	0	0	0	uncharacterized LOC104914110
LOC104915262	0	0	0	0	0	0	G-protein coupled receptor 98-like
LOC104915937	0	0	0	0	0	0	mas-related G-protein coupled receptor member H-like
LOC104915940	0	0	0	0	0	0	olfactory receptor 4B1-like
LOC104915956	0	0	0	0	0	0	uncharacterized LOC104915956
LOC104916008	0	0	0	0	0	0	keratin, type I cytoskeletal 9-like
LOC104916375	0	0	0	0	0	0	gonadotropin-releasing hormone II receptor-like
LOC104916561	0	0	0	0	0	0	GADD45G interacting protein 1
LOC104916673							
	0	0	0	0	0	0	maestro heat-like repeat-containing protein family member 2A
LOC104917378	0	0	0	0	0	0	scale keratin-like

LOC104917391	0	0	0	0	0	0	membrane primary amine oxidase-like
LOC104917400	0	0	0	0	0	0	cell wall integrity and stress response component 3-like
NEUROD6	0	0	0	0	0	0	neuronal differentiation 6
RAX2	0	0	0	0	0	0	retina and anterior neural fold homeobox 2
RBBP8NL	0	0	0	0	0	0	RBBP8 N-terminal like
TMEM52B	0	0	0	0	0	0	transmembrane protein 52B
TTLL10	0	0	0	0	0	0	tubulin tyrosine ligase-like family, member 10
LOC104913327	1	1	3	0	0	0	uncharacterized LOC104913327
LOC104911714	0	0	1	0	0	0	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase zeta-1-like
DLX6	1	1	1	0	0	0	distal-less homeobox 5
LOC104912099	0	1	1	0	0	0	uncharacterized LOC104912099
LOC104915660	1	1	1	0	0	0	G-protein coupled receptor 98-like
GNAT3	0	0	1	0	0	0	guanine nucleotide binding protein (G protein), alpha transducing activity polypeptide 1
LOC104916199	0	0	1	0	0	0	interleukin-12 receptor subunit beta-1-like
LOC104914162	0	0	1	0	0	0	uncharacterized LOC104914162
LOC104913382	0	0	1	0	0	0	uncharacterized LOC104913382
LOC104916744	0	0	1	0	0	0	uncharacterized LOC104916744
ST8SIA3	0	0	1	0	0	0	ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 3
LOC104909586	0	0	1	0	0	0	uncharacterized LOC104909586
LOC104914969	0	1	0	0	0	0	ankyrin repeat and death domain-containing protein 1B-like
LOC104911529	1	0	0	0	0	0	uncharacterized LOC104911529
LOC104910392	0	0	0	0	0	0	uncharacterized LOC104910392
LOC104917044	1	0	0	0	0	0	voltage-dependent L-type calcium channel subunit alpha-1C
LOC104916601	0	0	0	0	0	0	uncharacterized LOC104916601
LOC104915552	0	0	0	0	0	0	uncharacterized LOC104915552
LOC104915683	1	0	0	0	0	0	putative protein TPRXL
LOC100546895	1	0	0	0	0	0	phospholipid-transporting ATPase IB
LOC104915360	0	0	0	0	0	0	uncharacterized LOC104915360
LOC104912278	0	0	0	0	0	0	uncharacterized LOC104912278
LOC104915935	0	0	0	0	0	0	class II histocompatibility antigen, B-L beta chain-like
LOC104911892	1	0	0	0	0	0	uncharacterized LOC104911892
C6H9orf152	1	0	0	0	0	0	chromosome 6 open reading frame, human C7orf31
GRIN1	0	0	0	0	0	0	glutamate receptor, ionotropic, kainate 4
LOC100539842	0	0	0	0	0	0	vacuole membrane protein 1-like
LOC104909887	0	0	0	0	0	0	uncharacterized LOC104909887
LOC100540222	0	0	0	0	0	0	uncharacterized protein KIAA1841-like
LOC100542621	0	0	0	0	0	0	uncharacterized LOC100542618
LOC100543458	0	0	0	0	0	0	uncharacterized LOC100543444
LOC104909419	0	0	0	0	0	0	PHD finger protein 7-like
LOC104909954	0	0	0	0	0	0	protein eyes shut homolog
LOC104910800	0	0	0	0	0	0	zinc finger protein 586-like
LOC104911391	0	0	0	0	0	0	lovastatin diketide synthase LovF-like
LOC104911447	0	0	0	0	0	0	uncharacterized LOC104911447
LOC104912587	0	0	0	0	0	0	uncharacterized LOC104912587
LOC104913080	0	0	0	0	0	0	transient receptor potential cation channel subfamily V member 6-like
LOC104913094	0	0	0	0	0	0	uncharacterized LOC104913094
LOC104913263	0	0	0	0	0	0	serine protease inhibitor Kazal-type 6-like
LOC104913293	0	0	0	0	0	0	calcium/calmodulin-dependent protein kinase type II subunit alpha-like
LOC104914416	0	0	0	0	0	0	feather beta keratin-like
LOC104915391	0	0	0	0	0	0	sulfotransferase family cytosolic 2B member 1-like
LOC104915512	0	0	0	0	0	0	nuclear receptor corepressor 2-like
LOC104915557	0	0	0	0	0	0	histone-lysine N-methyltransferase 2A-like
LOC104915785	0	0	0	0	0	0	uncharacterized LOC104915785
LOC104916264	0	0	0	0	0	0	SKI family transcriptional corepressor 1-like
LOC104917126	0	0	0	0	0	0	uncharacterized LOC104917126
LOC104917514	0	0	0	0	0	0	olfactomedin-4-like
RAB3C	0	0	0	0	0	0	RAB3C, member RAS oncogene family
SLC13A2	0	0	0	0	0	0	solute carrier family 13 (sodium-dependent dicarboxylate transporter), member 2
LOC104915249	0	0	2	0	0	0	multiple C2 and transmembrane domain-containing protein 1
LOC104909353	0	0	1	0	0	0	uncharacterized LOC104909353
LOC104914011	0	3	1	0	0	0	serine/threonine-protein kinase Sgk2-like
LOC104910916	0	0	1	0	0	0	T-cell surface glycoprotein CD8 alpha chain-like
LOC104914047	0	0	1	0	0	0	uncharacterized LOC104914047
LOC100549047	0	0	1	0	0	0	formin-2-like
LOC104911055	2	0	1	0	0	0	uncharacterized LOC104911055
FSHB	0	0	1	0	0	0	fibronectin type III and SPRY domain containing 2
LOC104913860	1	0	1	0	0	0	uncharacterized LOC104913860
LOC100540364	0	0	1	0	0	0	protein SCAF11
LOC104916577	1	0	1	0	0	0	adenylate cyclase type 10-like
XKR9	0	0	1	0	0	0	XK, Kell blood group complex subunit-related family, member 9
C29H17orf104	0	0	1	0	0	0	chromosome 28 open reading frame, human C6orf89

LOC104917550	0	0	1	0	0	0	uncharacterized LOC104917550
LOC104910630	0	0	1	0	0	0	uncharacterized LOC104910630
LHX9	0	1	1	0	0	0	LIM homeobox 8
LOC100544555	1	1	1	0	0	0	olfactory receptor 1038-like
LOC100539040	0	0	1	0	0	0	leucine-rich repeat-containing protein 7-like
IL22	0	0	1	0	0	0	interleukin 21 receptor
LOC104916617	0	0	1	0	0	0	pre-mRNA-splicing factor CWC22 homolog
LOC104912723	0	0	1	0	0	0	uncharacterized LOC104912723
ANKK1	0	0	1	0	0	0	ankyrin repeat and kinase domain containing 1
GJA10	0	0	1	0	0	0	gap junction protein, alpha 1, 43kDa
HNF1B	0	0	1	0	0	0	HNF1 homeobox A
LOC100541387	0	0	1	0	0	0	1,25-dihydroxyvitamin D(3) 24-hydroxylase, mitochondrial
LOC100545389	0	0	1	0	0	0	transmembrane channel-like protein 7
LOC100546611	0	0	1	0	0	0	A disintegrin and metalloproteinase with thrombospondin motifs 18
LOC104910330	0	0	1	0	0	0	desmoglein-4-like
LOC104910437	0	0	1	0	0	0	regulating synaptic membrane exocytosis protein 2-like
LOC104910440	0	0	1	0	0	0	CUB and sushi domain-containing protein 3-like
LOC104917622	0	0	1	0	0	0	uncharacterized LOC104917622
SP9	0	0	1	0	0	0	Sp9 transcription factor
LOC104909862	0	0	1	0	0	0	uncharacterized LOC104909862
LRIT2	0	0	1	0	0	0	leucine-rich repeat, immunoglobulin-like and transmembrane domains 2
LOC100551424	0	0	1	0	0	0	rho-related GTP-binding protein RhoF-like
LOC104914336	0	0	1	0	0	0	grainyhead-like protein 3 homolog
LOC104917131	0	0	1	0	0	0	uncharacterized LOC104917131
LOC104909469	0	0	1	0	0	0	uncharacterized LOC104909469
NOBOX	0	0	1	0	0	0	NOBOX oogenesis homeobox
NR2E3	1	0	1	0	0	0	nuclear receptor subfamily 2, group E, member 3
LOC104909590	0	0	1	0	0	0	uncharacterized LOC104909590
LOC104910013	0	0	1	0	0	0	uncharacterized LOC104910013
LOC104910968	0	0	1	0	0	0	olfactory receptor-like protein COR4
LOC104912229	0	0	1	0	0	0	uncharacterized LOC104912229
LOC104912711	0	0	1	0	0	0	uncharacterized LOC104912711
LOC104915459	0	0	1	0	0	0	uncharacterized LOC104915459
LOC104916224	0	0	1	0	0	0	amiloride-sensitive amine oxidase [copper-containing] pseudogene
LOC104917593	0	0	1	0	0	0	uncharacterized LOC104917593
FOXA2	0	1	1	0	0	0	forkhead box A1
LOC100549121	1	0	1	0	0	0	monocarboxylate transporter 8-like
LOC104912821	0	0	1	0	0	0	ovostatin homolog
LOC104914246	0	0	1	0	0	0	uncharacterized LOC104914246
LOC104911482	0	0	1	0	0	0	uncharacterized LOC104911482
LOC104909743	1	0	1	0	0	0	uncharacterized LOC104909743
LOC104917385	0	0	1	0	0	0	uncharacterized LOC104917385
LOC100542475	0	0	1	0	0	0	cytosolic beta-glucosidase-like
LOC104910485	0	0	1	0	0	0	protein FAM135B-like
LOC104916830	0	0	1	0	0	0	uncharacterized LOC104916830
FAM71D	0	0	1	0	0	0	family with sequence similarity 69, member C
LOC100542067	0	0	1	0	0	0	structural maintenance of chromosomes protein 1B
LOC100542495	0	0	1	0	0	0	cytochrome P450 1A4
LOC100550884	0	0	1	0	0	0	apovitellenin-1
LOC104909905	0	0	1	0	0	0	uncharacterized LOC104909905
LOC104910311	0	0	1	0	0	0	uncharacterized LOC104910311
LOC104910419	0	0	1	0	0	0	regulating synaptic membrane exocytosis protein 2-like
LOC104910527	0	0	1	0	0	0	uncharacterized LOC104910527
LOC104911708	0	0	1	0	0	0	uncharacterized LOC104911708
LOC104917173	0	0	1	0	0	0	PHD finger protein 7-like
RAD51AP2	0	0	1	0	0	0	RAD51 associated protein 2
LOC104910398	1	1	1	0	0	0	uncharacterized LOC104910398
LOC104910252	0	1	1	0	0	0	disks large-associated protein 1-like
LOC104916136	0	1	1	0	0	0	caskin-1-like
LOC104910305	0	0	1	0	0	0	uncharacterized LOC104910305
RFX8	1	0	1	0	0	0	RFX family member 8, lacking RFX DNA binding domain
SALL3	0	0	1	0	0	0	spalt-like transcription factor 3
AVPR1B	0	0	1	0	0	0	arginine vasopressin receptor 1B
LOC104909701	0	0	1	0	0	0	ryanodine receptor 2-like
LOC104916028	0	0	1	0	0	0	annexin A4-like
LOC104910416	1	0	1	0	0	0	uncharacterized LOC104910416
LOC104909552	0	0	1	0	0	0	uncharacterized LOC104909552
LOC104909658	0	0	1	0	0	0	uncharacterized LOC104909658
LOC104911290	0	0	1	0	0	0	uncharacterized LOC104911290
LOC104911568	1	0	1	0	0	0	uncharacterized LOC104911568
LOC104910546	1	0	1	0	0	0	uncharacterized LOC104910546
CCDC33	0	0	1	0	0	0	coiled-coil domain containing 30
CHRNA6	0	0	1	0	0	0	cholinergic receptor, nicotinic, alpha 5 (neuronal)
HOXB1	0	0	1	0	0	0	homeobox A9
LOC100542503	0	0	1	0	0	0	3 beta-hydroxysteroid dehydrogenase type 7-like

LOC100548196	0	0	1	0	0	0	RNA-binding motif, single-stranded-interacting protein 1-like
LOC104909907	0	0	1	0	0	0	uncharacterized LOC104909907
LOC104910053	0	0	1	0	0	0	patched domain-containing protein 4
LOC104910518	0	0	1	0	0	0	uncharacterized LOC104910518
LOC104910801	0	0	1	0	0	0	uncharacterized LOC104910801
LOC104910863	0	0	1	0	0	0	uncharacterized LOC104910863
LOC104911815	0	0	1	0	0	0	uncharacterized LOC104911815
LOC104914069	0	0	1	0	0	0	uncharacterized LOC104914069
LOC104916565	0	0	1	0	0	0	kinesin-like protein KIF20B
LOC104916994	0	0	1	0	0	0	uncharacterized LOC104916994
LOC104917277	0	0	1	0	0	0	protein phosphatase 1 regulatory subunit 37-like
LOC104917304	0	26	0	0	0	0	myosin heavy chain, skeletal muscle-like
LOC104917351	1	1	0	0	0	0	uncharacterized LOC104917351
CARTPT	0	1	0	0	0	0	cysteinyl-tRNA synthetase 2, mitochondrial (putative)
LOC104913875	0	1	0	0	0	0	claudin-3-like
LOC104916963	0	1	0	0	0	0	uncharacterized LOC104916963
LOC104910772	1	1	0	0	0	0	atrial natriuretic peptide-converting enzyme-like
LOC104913867	0	1	0	0	0	0	uncharacterized LOC104913867
HEPHL1	1	1	0	0	0	0	hephaestin
LOC104910000	1	1	0	0	0	0	uncharacterized LOC104910000
LOC104916807	0	1	0	0	0	0	uncharacterized LOC104916807
LOC104915172	1	1	0	0	0	0	uncharacterized LOC104915172
LOC104910544	0	1	0	0	0	0	uncharacterized LOC104910544
LOC104915523	0	1	0	0	0	0	tripartite motif-containing protein 10-like
LOC104910329	1	0	0	0	0	0	uncharacterized LOC104910329
NPVF	0	0	0	0	0	0	neuropeptide VF precursor
LOC104916665	1	0	0	0	0	0	histone H3-like
LOC104915622	0	0	0	0	0	0	uncharacterized LOC104915622
MCHR1	0	0	0	0	0	0	melanin-concentrating hormone receptor 1
LOC100542931	0	0	0	0	0	0	feather keratin 1-like
LOC104915441	0	0	0	0	0	0	uncharacterized LOC104915441
BMP10	1	0	0	0	0	0	bone morphogenetic protein 10
LOC104909630	0	0	0	0	0	0	uncharacterized LOC104909630
LOC104910115	0	0	0	0	0	0	uncharacterized LOC104910115
LOC104912709	1	0	0	0	0	0	uncharacterized LOC104912709
WNT3	0	0	0	0	0	0	wingless-type MMTV integration site family, member 3
LOC104911009	1	0	0	0	0	0	uncharacterized LOC104911009
LOC104911218	0	0	0	0	0	0	uncharacterized LOC104911218
LOC104911656	0	0	0	0	0	0	uncharacterized LOC104911656
LOC104912334	0	0	0	0	0	0	uncharacterized LOC104912334
LOC104915219	1	0	0	0	0	0	cyclin-A1-like
LOC104916631	0	0	0	0	0	0	uncharacterized LOC104916631
ISL1	0	0	0	0	0	0	interferon stimulated exonuclease gene 20kDa-like 2
LOC104910434	0	0	0	0	0	0	uncharacterized LOC104910434
NKX2-1	0	0	0	0	0	0	NK2 homeobox 1
VSX2	0	0	0	0	0	0	visual system homeobox 2
LOC104916681	0	0	0	0	0	0	spectrin beta chain, non-erythrocytic 4-like
CCDC108	0	0	0	0	0	0	coiled-coil domain containing 107
LOC100550136	0	0	0	0	0	0	galectin-related protein A-like
LOC100551287	0	0	0	0	0	0	bone morphogenetic protein 4-like
LOC104912707	0	0	0	0	0	0	uncharacterized LOC104912707
LOC104913280	0	0	0	0	0	0	uncharacterized LOC104913280
LOC104911769	0	0	0	0	0	0	uncharacterized LOC104911769
LOC104909759	0	0	0	0	0	0	P2Y purinoceptor 1-like
CHDC2	0	0	0	0	0	0	chromodomain helicase DNA binding protein 9
LOC104915608	0	0	0	0	0	0	inositol 1,4,5-trisphosphate receptor type 3-like
LOC104911491	0	0	0	0	0	0	uncharacterized LOC104911491
LOC104917397	0	0	0	0	0	0	maestro heat-like repeat-containing protein family member 2B
LOC100540274	0	0	0	0	0	0	nudC domain-containing protein 1-like
RDH8	0	0	0	0	0	0	retinol dehydrogenase 8 (all-trans)
LOC104910169	0	0	0	0	0	0	uncharacterized LOC104910169
LOC104910893	0	0	0	0	0	0	uncharacterized LOC104910893
WNT3A	0	0	0	0	0	0	wingless-type MMTV integration site family, member 3A
LOC104915790	1	0	0	0	0	0	maestro heat-like repeat-containing protein family member 2B
CRYBB2	0	0	0	0	0	0	crystallin, beta B1
GUCA1A	0	0	0	0	0	0	gametocyte specific factor 1
LOC104909667	0	0	0	0	0	0	kinesin-like protein KIF26B
LOC104909738	0	0	0	0	0	0	uncharacterized LOC104909738
LOC104912102	0	0	0	0	0	0	uncharacterized LOC104912102
LOC104912277	0	0	0	0	0	0	uncharacterized LOC104912277
LOC104912579	0	0	0	0	0	0	uncharacterized LOC104912579
LOC104917395	0	0	0	0	0	0	uncharacterized LOC104917395
LOC104917610	0	0	0	0	0	0	uncharacterized LOC104917610
LOC104912554	1	0	0	0	0	0	uncharacterized LOC104912554
EHF	0	0	0	0	0	0	EH-domain containing 4
HEPACAM2	0	0	0	0	0	0	hepatic and glial cell adhesion molecule

LOC100538424	0	0	0	0	0	0	microtubule associated protein 7
LOC100549188	0	0	0	0	0	0	torsin-1A-like
LOC104910816	0	0	0	0	0	0	uncharacterized LOC104910816
LOC104912882	0	0	0	0	0	0	uncharacterized LOC104912882
LOC104913887	0	0	0	0	0	0	PHD finger protein 7-like
LOC104913917	0	0	0	0	0	0	uncharacterized LOC104913917
LOC104915481	0	0	0	0	0	0	olfactory receptor 1411-like
LOC104915562	0	0	0	0	0	0	ETS translocation variant 4-like
LOC104915836							
	0	0	0	0	0	0	leukocyte immunoglobulin-like receptor subfamily A member 2
LOC104916417	0	0	0	0	0	0	uncharacterized LOC104916417
LOC104917271	0	0	0	0	0	0	fibrinogen-like protein A
LOC104917486	0	0	0	0	0	0	uncharacterized LOC104917486
TMPRSS3	0	0	0	0	0	0	transmembrane protease, serine 3
LOC104913455	0	0	0	0	0	0	uncharacterized LOC104913455
DTHD1	0	0	0	0	0	0	D-tyrosyl-tRNA deacylase 2 (putative)
DUOXA1	0	0	0	0	0	0	dual oxidase 2
GPR6	0	0	0	0	0	0	G protein-coupled receptor 56
LOC100543487	0	0	0	0	0	0	testis-specific serine/threonine-protein kinase 6-like
LOC100546118	0	0	0	0	0	0	selenoprotein M
LOC104909886	0	0	0	0	0	0	glutamate receptor ionotropic, kainate 2-like
LOC104910629	0	0	0	0	0	0	uncharacterized LOC104910629
LOC104910836	0	0	0	0	0	0	uncharacterized LOC104910836
LOC104911157	0	0	0	0	0	0	uncharacterized LOC104911157
LOC104911210	0	0	0	0	0	0	uncharacterized LOC104911210
LOC104913077	0	0	0	0	0	0	uncharacterized LOC104913077
LOC104913444	0	0	0	0	0	0	uncharacterized LOC104913444
LOC104913974	0	0	0	0	0	0	immunoglobulin superfamily member 1-like
LOC104913986	0	0	0	0	0	0	uncharacterized LOC104913986
LOC104914040	0	0	0	0	0	0	uncharacterized LOC104914040
LOC104914949	0	0	0	0	0	0	uncharacterized LOC104914949
LOC104915314	0	0	0	0	0	0	E3 ubiquitin-protein ligase Topors-like
LOC104916235							
	0	0	0	0	0	0	5'-AMP-activated protein kinase catalytic subunit alpha-1-like
NFKBID							nuclear factor of kappa light polypeptide gene enhancer in B-cells
	0	0	0	0	0	0	inhibitor, delta
NPBWR2	0	0	0	0	0	0	neuropeptides B/W receptor 2
GOLT1A	1	0	0	0	0	0	golgi phosphoprotein 3-like
ACRBP	1	0	0	0	0	0	acrosin binding protein
LOC104911719	1	0	0	0	0	0	uncharacterized LOC104911719
ANGPTL3	0	0	0	0	0	0	angiopoietin-like 3
CER1	0	0	0	0	0	0	choline/ethanolamine phosphotransferase 1
HSD17B2	0	0	0	0	0	0	hydroxysteroid (17-beta) dehydrogenase 12
LOC104909570	0	0	0	0	0	0	uncharacterized LOC104909570
LOC104910364	0	0	0	0	0	0	uncharacterized LOC104910364
LOC104910580	0	0	0	0	0	0	uncharacterized LOC104910580
LOC104910603	0	0	0	0	0	0	uncharacterized LOC104910603
LOC104911288							
	0	0	0	0	0	0	inositol 1,4,5-trisphosphate receptor-interacting protein-like 1
LOC104911670	0	0	0	0	0	0	uncharacterized LOC104911670
LOC104912163	0	0	0	0	0	0	uncharacterized LOC104912163
LOC104912454	0	0	0	0	0	0	uncharacterized LOC104912454
LOC104914852	0	0	0	0	0	0	complement component C6-like
LOC104915139							
	0	0	0	0	0	0	maestro heat-like repeat-containing protein family member 7
LOC104915324	0	0	0	0	0	0	proteoglycan 4-like
LOC104915605	0	0	0	0	0	0	uncharacterized LOC104915605
LOC104915901	0	0	0	0	0	0	homeobox protein Hox-C13-like
LOC104917364	0	0	0	0	0	0	helix-loop-helix protein 2
OTX2	0	0	0	0	0	0	orthodenticle homeobox 2
SNTG2	0	0	0	0	0	0	syntrophin, gamma 2
TPL	0	0	0	0	0	0	pancreatic lipase
LOC100541465	1	0	0	0	0	0	synaptotagmin-like protein 2
LOC104909358							
	0	0	0	0	0	0	potassium voltage-gated channel subfamily D member 3-like
LOC104910784	0	0	0	0	0	0	gamma-aminobutyric acid receptor subunit epsilon-like
LOC104910891	0	0	0	0	0	0	uncharacterized LOC104910891
LOC104912925	0	0	0	0	0	0	uncharacterized LOC104912925
LOC104916123	0	0	0	0	0	0	forkhead box protein B2
LOC104911188	1	0	0	0	0	0	uncharacterized LOC104911188
WNT8A	1	0	0	0	0	0	wingless-type MMTV integration site family, member 8A
FRK	0	0	0	0	0	0	FSHD region gene 1
LOC104910236	0	0	0	0	0	0	uncharacterized LOC104910236
LOC104915073	0	0	0	0	0	0	uncharacterized LOC104915073
CCDC63	0	0	0	0	0	0	coiled-coil domain containing 61
FAM3D	0	0	0	0	0	0	family with sequence similarity 3, member C
IL26	0	0	0	0	0	0	interleukin 23, alpha subunit p19
LOC100303679	0	0	0	0	0	0	myogenin
LOC100539521	0	0	0	0	0	0	leucine-rich repeat-containing protein 16A

LOC100548539	0	0	0	0	0	0	uncharacterized LOC100548534
LOC104909344	0	0	0	0	0	0	contactin-5-like
LOC104910154	0	0	0	0	0	0	uncharacterized LOC104910154
LOC104910163	0	0	0	0	0	0	uncharacterized LOC104910163
LOC104910191	0	0	0	0	0	0	uncharacterized LOC104910191
LOC104910354	0	0	0	0	0	0	uncharacterized LOC104910354
LOC104910712	0	0	0	0	0	0	uncharacterized LOC104910712
LOC104911446	0	0	0	0	0	0	MAM and LDL-receptor class A domain-containing protein 1-like
LOC104912011	0	0	0	0	0	0	uncharacterized LOC104912011
LOC104912208	0	0	0	0	0	0	protein shisa-1-like
LOC104912676	0	0	0	0	0	0	uncharacterized LOC104912676
LOC104913139	0	0	0	0	0	0	uncharacterized LOC104913139
LOC104913175	0	0	0	0	0	0	uncharacterized LOC104913175
LOC104913202	0	0	0	0	0	0	uncharacterized LOC104913202
LOC104913666	0	0	0	0	0	0	alpha-1-acid glycoprotein 2-like
LOC104914417	0	0	0	0	0	0	feather keratin Cos1-1/Cos1-3/Cos2-1-like
LOC104915005	0	0	0	0	0	0	zinc finger protein GLIS3-like
LOC104915479	0	0	0	0	0	0	cytochrome P450 2H1-like
LOC104915631	0	0	0	0	0	0	uncharacterized LOC104915631
LOC104915642	0	0	0	0	0	0	uncharacterized LOC104915642
LOC104915701	0	0	0	0	0	0	bromodomain adjacent to zinc finger domain protein 1A-like
LOC104915704	0	0	0	0	0	0	absent in melanoma 1 protein-like
LOC104915714	0	0	0	0	0	0	uncharacterized membrane protein YFL067W-like
LOC104916573	0	0	0	0	0	0	zinc finger CCHH domain-containing protein 11A-like
LOC104916813	0	0	0	0	0	0	3 beta-hydroxysteroid dehydrogenase/Delta 5-->4-isomerase-like
LOC104917010	0	0	0	0	0	0	peptide YY-like
LOC104917147	0	0	0	0	0	0	uncharacterized LOC104917147
LOC104917452	0	0	0	0	0	0	uncharacterized LOC104917452
PRDM12	0	0	0	0	0	0	PR domain containing 12
LOC100542269	1	0	0	0	0	0	TSC22 domain family protein 3-like
LOC100547103	1	0	0	0	0	0	ES1 protein homolog, mitochondrial-like
LOC104913352	1	0	0	0	0	0	uncharacterized LOC104913352
DNAJC22	1	0	0	0	0	0	DnaJ (Hsp40) homolog, subfamily C, member 21
LOC100543967	1	0	0	0	0	0	DNA polymerase kappa-like
LOC104910259	1	0	0	0	0	0	uncharacterized LOC104910259
LOC104912660	1	0	0	0	0	0	receptor-transporting protein 2-like
LOC104912740	1	0	0	0	0	0	uncharacterized LOC104912740
LOC104912934	1	0	0	0	0	0	uncharacterized LOC104912934
LOC104915132	1	0	0	0	0	0	contactin-associated protein-like 3B
LOC104915773	1	0	0	0	0	0	uncharacterized LOC104915773
LOC104916636	1	0	0	0	0	0	beta-citrylglytutamate synthase B
LOC104917398	1	0	0	0	0	0	mucin-2-like
DMBX1	1	0	0	0	0	0	DNA methyltransferase 1 associated protein 1
LOC100540167	1	0	0	0	0	0	carbonic anhydrase 9-like
LOC104909967	1	0	0	0	0	0	uncharacterized LOC104909967
LOC104910810	1	0	0	0	0	0	uncharacterized LOC104910810
LOC104911841	1	0	0	0	0	0	uncharacterized LOC104911841
LOC104912268	1	0	0	0	0	0	uncharacterized LOC104912268
LOC104913302	1	0	0	0	0	0	short transient receptor potential channel 7-like
LOC104913404	1	0	0	0	0	0	uncharacterized LOC104913404
LOC104915688	1	0	0	0	0	0	uncharacterized LOC104915688
LOC104916172	1	0	0	0	0	0	E3 ubiquitin-protein ligase TRIM39-like
LOC104916660	1	0	0	0	0	0	maestro heat-like repeat-containing protein family member 2B
LOC104916691	1	0	0	0	0	0	keratin-associated protein 21-1-like
LOC104909274	1	0	0	0	0	0	rhabdoid tumor deletion region protein 1-like
LOC104910159	1	0	0	0	0	0	uncharacterized LOC104910159
LOC104912493	1	0	0	0	0	0	cytochrome P450 2J2-like
LOC104915321	1	0	0	0	0	0	interferon beta-like
LOC104916449	1	0	0	0	0	0	uncharacterized LOC104916449
LOC104916944	1	0	0	0	0	0	zinc transporter ZIP5-like
OTC	1	0	0	0	0	0	ornithine carbamoyltransferase
POU1F1	1	0	0	0	0	0	POU class 1 homeobox 1
ZSCAN21	1	0	0	0	0	0	zinc finger and SCAN domain containing 21
COLCA2	0	0	0	0	0	0	collagen, type IX, alpha 3
GPHB5	0	0	0	0	0	0	G protein-coupled estrogen receptor 1
LOC100541702	0	0	0	0	0	0	2-oxoglutarate receptor 1-like
LOC100542070	0	0	0	0	0	0	olfactory receptor 1052-like
LOC100545164	0	0	0	0	0	0	alcohol dehydrogenase 1
LOC100546345	0	0	0	0	0	0	double-stranded RNA-binding protein Staufen homolog 2-like
LOC100551121	0	0	0	0	0	0	solute carrier family 2, facilitated glucose transporter member 11-like
LOC104911742	0	0	0	0	0	0	uncharacterized LOC104911742
LOC104911800	0	0	0	0	0	0	uncharacterized LOC104911800
LOC104912713	0	0	0	0	0	0	uncharacterized LOC104912713

LOC104914024	0	0	0	0	0	0	uncharacterized LOC104914024
LOC104915796	0	0	0	0	0	0	uncharacterized LOC104915796
MSGN1	0	0	0	0	0	0	mesogenin 1
TMEM174	0	0	0	0	0	0	transmembrane protein 174
ACTL9	0	0	0	0	0	0	actin-like 9
AQP2	0	0	0	0	0	0	aquaporin 2 (collecting duct)
ASIC5	0	0	0	0	0	0	acid-sensing (proton-gated) ion channel family member 5
BARHL1	0	0	0	0	0	0	BarH-like homeobox 1
BARHL2	0	0	0	0	0	0	BarH-like homeobox 2
BHLHA9	0	0	0	0	0	0	basic helix-loop-helix family, member a9
C1QL4	0	0	0	0	0	0	complement component 1, q subcomponent-like 1
C21H17orf64	0	0	0	0	0	0	chromosome 20 open reading frame, human C17orf89
C2H2orf70	0	0	0	0	0	0	chromosome 2 open reading frame, human C2orf50
C8A	0	0	0	0	0	0	chromosome 7 open reading frame, human C2orf88
C9HXorf65	0	0	0	0	0	0	chromosome 9 open reading frame, human CXorf57
CCDC172	0	0	0	0	0	0	coiled-coil domain containing 171
CCDC42	0	0	0	0	0	0	coiled-coil domain containing 40
CDHR5	0	0	0	0	0	0	cadherin-related family member 4
CDX1	0	0	0	0	0	0	CDV3 homolog (mouse)
CELA1	0	0	0	0	0	0	carboxyl ester lipase
CLPP	0	0	0	0	0	0	cleavage and polyadenylation factor I subunit 1
CNGA1	0	0	0	0	0	0	CTD nuclear envelope phosphatase 1 regulatory subunit 1
COX3	0	0	0	0	0	0	coactosin-like F-actin binding protein 1
CPB2	0	0	0	0	0	0	C3 and PZP-like, alpha-2-macroglobulin domain containing 8
CRHR1	0	0	0	0	0	0	corticotropin releasing hormone binding protein
DDX4	0	0	0	0	0	0	DEAD (Asp-Glu-Ala-Asp) box helicase 3, X-linked
DLEU7	0	0	0	0	0	0	deleted in lung and esophageal cancer 1
DMRTB1	0	0	0	0	0	0	DMRT-like family A2
EMX1	0	0	0	0	0	0	epithelial membrane protein 2
ENOSF1	0	0	0	0	0	0	enolase-phosphatase 1
FERD3L	0	0	0	0	0	0	fer-1-like family member 6
FEZF1	0	0	0	0	0	0	fasciculation and elongation protein zeta 1 (zyglin I)
FGF20	0	0	0	0	0	0	fibroblast growth factor 2 (basic)
FOXB1	0	0	0	0	0	0	forkhead box A2
FOXG1	0	0	0	0	0	0	forkhead box F2
FOXP1	0	0	0	0	0	0	forkhead box M1
GIP	0	0	0	0	0	0	GLNS complex subunit 4 (Sld5 homolog)
GKN2	0	0	0	0	0	0	G kinase anchoring protein 1
GMNC	0	0	0	0	0	0	GEM interacting protein
GRXCR1	0	0	0	0	0	0	growth hormone regulated TBC protein 1
GSX1	0	0	0	0	0	0	glutathione S-transferase zeta 1
GSX2	0	0	0	0	0	0	GS homeobox 1
HAND1	0	0	0	0	0	0	histidine ammonia-lyase
HAPLN4	0	0	0	0	0	0	hyaluronan and proteoglycan link protein 3
HOXB13	0	0	0	0	0	0	homeobox B1
HOXC10	0	0	0	0	0	0	homeobox B9
HOXC11	0	0	0	0	0	0	homeobox C10
HOXC12	0	0	0	0	0	0	homeobox C11
HTR5A	0	0	0	0	0	0	5-hydroxytryptamine (serotonin) receptor 4, G protein-coupled
KCNQ2	0	0	0	0	0	0	potassium voltage-gated channel, KQT-like subfamily, member 1
LHX3	0	0	0	0	0	0	LIM homeobox 2
LHX5	0	0	0	0	0	0	LIM homeobox 4
LIN28A	0	0	0	0	0	0	LIM and senescent cell antigen-like domains 1
LOC100303687	0	0	0	0	0	0	vasoactive intestinal polypeptide receptor
LOC100538403	0	0	0	0	0	0	protein Wnt-11b-like
LOC100538407	0	0	0	0	0	0	killer cell lectin-like receptor subfamily B member 18 allele A
LOC100538570	0	0	0	0	0	0	C-type lectin domain family 2 member D-like
LOC100538789	0	0	0	0	0	0	calcium uptake protein 3, mitochondrial-like
LOC100538887	0	0	0	0	0	0	protein FAM135B
LOC100538986	0	0	0	0	0	0	solute carrier family 7 member 13-like
LOC100539020	0	0	0	0	0	0	uncharacterized LOC100539010
LOC100539041	0	0	0	0	0	0	histone H2A-beta, sperm-like
LOC100539176	0	0	0	0	0	0	cornulin-like
LOC100539228	0	0	0	0	0	0	1-acyl-sn-glycerol-3-phosphate acyltransferase alpha-like
LOC100539649	0	0	0	0	0	0	mitogen-activated protein kinase kinase kinase 21
LOC100539678	0	0	0	0	0	0	G protein-coupled receptor kinase 5-like
LOC100539791	0	0	0	0	0	0	neurolysin, mitochondrial-like
LOC100540001	0	0	0	0	0	0	tropomyosin beta chain
LOC100540256	0	0	0	0	0	0	fer-1-like protein 4
LOC100540413	0	0	0	0	0	0	uncharacterized LOC100540410
LOC100540568	0	0	0	0	0	0	scaffold attachment factor B2-like
LOC100540670	0	0	0	0	0	0	sodium-coupled neutral amino acid transporter 2
LOC100540876	0	0	0	0	0	0	cyclin-dependent kinase 7
LOC100540893	0	0	0	0	0	0	V-type proton ATPase catalytic subunit A-like
LOC100540970	0	0	0	0	0	0	neuferricin

LOC100541083	0	0	0	0	0	0	protein S100-A6
LOC100541135	0	0	0	0	0	0	uncharacterized LOC100541134
LOC100541332	0	0	0	0	0	0	zinc metalloproteinase-disintegrin-like MTP4
LOC100541489	0	0	0	0	0	0	mast cell protease 1A-like
LOC100541538	0	0	0	0	0	0	interaptin-like
LOC100541604	0	0	0	0	0	0	5-hydroxytryptamine receptor 7-like
LOC100541689							
	0	0	0	0	0	0	cAMP-dependent protein kinase catalytic subunit beta pseudogene
LOC100541756	0	0	0	0	0	0	catenin alpha-2
LOC100541845	0	0	0	0	0	0	dedicator of cytokinesis protein 2-like
LOC100541913	0	0	0	0	0	0	uncharacterized LOC100541906
LOC100541996	0	0	0	0	0	0	inhibin beta E chain-like
LOC100542106	0	0	0	0	0	0	keratin, type I cytoskeletal 12-like
LOC100542155	0	0	0	0	0	0	cytochrome P450 26C1
LOC100542304	0	0	0	0	0	0	minor histocompatibility protein HA-1-like
LOC100542473	0	0	0	0	0	0	dystonin
LOC100542684	0	0	0	0	0	0	b(0,+)-type amino acid transporter 1-like
LOC100542926	0	0	0	0	0	0	C-type natriuretic peptide 1-like
LOC100543202	0	0	0	0	0	0	cadherin-19
LOC100543307							
	0	0	0	0	0	0	mitotic checkpoint serine/threonine-protein kinase BUB1 beta-like
LOC100543359	0	0	0	0	0	0	cadherin-7-like
LOC100543439	0	0	0	0	0	0	selenium-binding protein 1-like
LOC100543548	0	0	0	0	0	0	zinc finger protein 710-like
LOC100543582	0	0	0	0	0	0	zona pellucida sperm-binding protein 3
LOC100543673	0	0	0	0	0	0	vitrin
LOC100543701	0	0	0	0	0	0	dual specificity testis-specific protein kinase 1-like
LOC100543737	0	0	0	0	0	0	ras GTPase-activating protein 4-like
LOC100543747	0	0	0	0	0	0	proprotein convertase subtilisin/kexin type 5-like
LOC100543857	0	0	0	0	0	0	guanylin-like
LOC100543858	0	0	0	0	0	0	olfactory receptor 14J1-like
LOC100544060	0	0	0	0	0	0	dymeclin-like
LOC100544071	0	0	0	0	0	0	uncharacterized LOC100544066
LOC100544079	0	0	0	0	0	0	WD repeat-containing protein C2orf44 homolog
LOC100544162	0	0	0	0	0	0	NIPBL, cohesin loading facto
LOC100544322	0	0	0	0	0	0	ephrin type-B receptor 5-like
LOC100544391	0	0	0	0	0	0	extracellular sulfatase Sulf-1-like
LOC100544478	0	0	0	0	0	0	NIPBL, cohesin loading facto
LOC100544531	0	0	0	0	0	0	pro-neuregulin-1, membrane-bound isoform-like
LOC100544552	0	0	0	0	0	0	keratin, type II cytoskeletal 6B-like
LOC100544598	0	0	0	0	0	0	serologically defined colon cancer antigen 8 homolog
LOC100544690	0	0	0	0	0	0	la-related protein 6-like
LOC100544709	0	0	0	0	0	0	alcohol dehydrogenase class-3
LOC100544713	0	0	0	0	0	0	keratin, type II cytoskeletal 5-like
LOC100544787	0	0	0	0	0	0	arylacetamide deacetylase-like 4
LOC100544792	0	0	0	0	0	0	feather keratin Cos1-1/Cos1-3/Cos2-1-like
LOC100544805	0	0	0	0	0	0	adenylate kinase 9
LOC100544897	0	0	0	0	0	0	myosin-binding protein C, slow-type-like
LOC100544939	0	0	0	0	0	0	cytochrome P450 26B1
LOC100545094	0	0	0	0	0	0	reelin
LOC100545392	0	0	0	0	0	0	olfactory receptor 1E2-like
LOC100545609	0	0	0	0	0	0	green-sensitive opsin
LOC100546136	0	0	0	0	0	0	serine/threonine-protein kinase D3-like
LOC100546477	0	0	0	0	0	0	general transcription factor IIH subunit 2
LOC100546637	0	0	0	0	0	0	arylsulfatase D-like
LOC100546840	0	0	0	0	0	0	probable carboxypeptidase X1
LOC100547210	0	0	0	0	0	0	SRC kinase signaling inhibitor 1
LOC100547278	0	0	0	0	0	0	exocyst complex component 1-like
LOC100547295	0	0	0	0	0	0	zona pellucida sperm-binding protein 3-like
LOC100547356	0	0	0	0	0	0	uncharacterized LOC100547354
LOC100547576	0	0	0	0	0	0	poly(rC)-binding protein 3-like
LOC100548148	0	0	0	0	0	0	centrosomal protein of 63 kDa-like
LOC100548298	0	0	0	0	0	0	pancreatic alpha-amylase
LOC100548320	0	0	0	0	0	0	cytohesin-3
LOC100548675	0	0	0	0	0	0	GTP-binding protein Rhes-like
LOC100548693							
	0	0	0	0	0	0	threonylcarbamoyladenosine tRNA methylthiotransferase-like
LOC100548829	0	0	0	0	0	0	complement receptor type 1-like
LOC100548984	0	0	0	0	0	0	uncharacterized LOC100548974
LOC100549006	0	0	0	0	0	0	transcription factor E2F3-like
LOC100549140	0	0	0	0	0	0	importin-9
LOC100549283	0	0	0	0	0	0	7,8-dihydro-8-oxoguanine triphosphatase-like
LOC100549427	0	0	0	0	0	0	GC-rich promoter binding protein 1-like 1
LOC100549445	0	0	0	0	0	0	TP53 target 5
LOC100549511	0	0	0	0	0	0	single-minded homolog 1
LOC100549568	0	0	0	0	0	0	exosome complex exonuclease RRP44-like
LOC100549689	0	0	0	0	0	0	ADP-ribosylation factor-like protein 3
LOC100549877	0	0	0	0	0	0	p53 apoptosis effector related to PMP-22-like
LOC100550096	0	0	0	0	0	0	mitochondrial calcium uptake family member 3

LOC100550249	0	0	0	0	0	0	uncharacterized LOC100550234
LOC100550472	0	0	0	0	0	0	feather keratin 1-like
LOC100550583	0	0	0	0	0	0	patched domain-containing protein 4 pseudogene
LOC100550598	0	0	0	0	0	0	lipase member M-like
LOC100550625	0	0	0	0	0	0	olfactory receptor 14J1-like
LOC100550626	0	0	0	0	0	0	class I histocompatibility antigen, F10 alpha chain-like
LOC100550780	0	0	0	0	0	0	claw keratin-like
LOC100551042	0	0	0	0	0	0	asporin-like
LOC100551205	0	0	0	0	0	0	dispanin subfamily A member 2b-like
LOC100551413	0	0	0	0	0	0	paired box protein Pax-9-like
LOC104909203	0	0	0	0	0	0	protocadherin gamma-A2-like
LOC104909207	0	0	0	0	0	0	tripartite motif-containing protein 10-like
LOC104909212							
	0	0	0	0	0	0	scavenger receptor cysteine-rich domain-containing group B protein-like
LOC104909241	0	0	0	0	0	0	uncharacterized LOC104909241
LOC104909349	0	0	0	0	0	0	orexin receptor type 2-like
LOC104909380	0	0	0	0	0	0	uncharacterized LOC104909380
LOC104909384	0	0	0	0	0	0	uncharacterized LOC104909384
LOC104909396	0	0	0	0	0	0	uncharacterized LOC104909396
LOC104909401	0	0	0	0	0	0	uncharacterized LOC104909401
LOC104909416	0	0	0	0	0	0	taste receptor type 2 member 40-like
LOC104909417	0	0	0	0	0	0	glucosylceramidase-like
LOC104909425	0	0	0	0	0	0	uncharacterized LOC104909425
LOC104909427	0	0	0	0	0	0	olfactory receptor 52L1-like
LOC104909436	0	0	0	0	0	0	olfactory receptor 52R1-like
LOC104909454	0	0	0	0	0	0	uncharacterized LOC104909454
LOC104909470	0	0	0	0	0	0	uncharacterized LOC104909470
LOC104909475	0	0	0	0	0	0	uncharacterized LOC104909475
LOC104909495	0	0	0	0	0	0	uncharacterized LOC104909495
LOC104909510	0	0	0	0	0	0	hyaluronidase-4-like
LOC104909523	0	0	0	0	0	0	uncharacterized LOC104909523
LOC104909530	0	0	0	0	0	0	uncharacterized LOC104909530
LOC104909546	0	0	0	0	0	0	uncharacterized LOC104909546
LOC104909566	0	0	0	0	0	0	uncharacterized LOC104909566
LOC104909575	0	0	0	0	0	0	uncharacterized LOC104909575
LOC104909576	0	0	0	0	0	0	uncharacterized LOC104909576
LOC104909592	0	0	0	0	0	0	uncharacterized LOC104909592
LOC104909609	0	0	0	0	0	0	uncharacterized LOC104909609
LOC104909610	0	0	0	0	0	0	uncharacterized LOC104909610
LOC104909611	0	0	0	0	0	0	uncharacterized LOC104909611
LOC104909616	0	0	0	0	0	0	uncharacterized LOC104909616
LOC104909623	0	0	0	0	0	0	uncharacterized LOC104909623
LOC104909661	0	0	0	0	0	0	WD repeat-containing protein 64
LOC104909662	0	0	0	0	0	0	WD repeat-containing protein 64-like
LOC104909678	0	0	0	0	0	0	uncharacterized LOC104909678
LOC104909771	0	0	0	0	0	0	UPF0762 protein C6orf58 homolog
LOC104909802	0	0	0	0	0	0	uncharacterized LOC104909802
LOC104909810	0	0	0	0	0	0	uncharacterized LOC104909810
LOC104909811	0	0	0	0	0	0	uncharacterized LOC104909811
LOC104909843	0	0	0	0	0	0	tyrosine-protein kinase FRK-like
LOC104909871	0	0	0	0	0	0	uncharacterized LOC104909871
LOC104909877	0	0	0	0	0	0	glutamate receptor ionotropic, kainate 2-like
LOC104909878	0	0	0	0	0	0	glutamate receptor ionotropic, kainate 2-like
LOC104909888	0	0	0	0	0	0	uncharacterized LOC104909888
LOC104909889	0	0	0	0	0	0	uncharacterized LOC104909889
LOC104909897	0	0	0	0	0	0	uncharacterized LOC104909897
LOC104909901	0	0	0	0	0	0	BTB/POZ domain-containing protein 6-B-like
LOC104909914	0	0	0	0	0	0	uncharacterized LOC104909914
LOC104909950	0	0	0	0	0	0	uncharacterized LOC104909950
LOC104910001	0	0	0	0	0	0	uncharacterized LOC104910001
LOC104910012	0	0	0	0	0	0	uncharacterized LOC104910012
LOC104910014	0	0	0	0	0	0	uncharacterized LOC104910014
LOC104910015	0	0	0	0	0	0	tudor domain-containing protein 15
LOC104910030	0	0	0	0	0	0	carboxypeptidase A1-like
LOC104910034	0	0	0	0	0	0	uncharacterized LOC104910034
LOC104910057	0	0	0	0	0	0	transcription factor AP-2-delta-like
LOC104910063	0	0	0	0	0	0	uncharacterized LOC104910063
LOC104910064	0	0	0	0	0	0	uncharacterized LOC104910064
LOC104910065	0	0	0	0	0	0	uncharacterized LOC104910065
LOC104910066	0	0	0	0	0	0	carboxypeptidase A1-like
LOC104910083	0	0	0	0	0	0	uncharacterized LOC104910083
LOC104910095	0	0	0	0	0	0	uncharacterized LOC104910095
LOC104910100	0	0	0	0	0	0	uncharacterized LOC104910100
LOC104910108	0	0	0	0	0	0	uncharacterized LOC104910108
LOC104910110	0	0	0	0	0	0	uncharacterized LOC104910110
LOC104910135	0	0	0	0	0	0	uncharacterized LOC104910135
LOC104910136	0	0	0	0	0	0	uncharacterized LOC104910136
LOC104910137	0	0	0	0	0	0	uncharacterized LOC104910137
LOC104910148	0	0	0	0	0	0	uncharacterized LOC104910148

LOC104910151	0	0	0	0	0	0	uncharacterized LOC104910151
LOC104910153	0	0	0	0	0	0	uncharacterized LOC104910153
LOC104910155	0	0	0	0	0	0	uncharacterized LOC104910155
LOC104910157	0	0	0	0	0	0	uncharacterized LOC104910157
LOC104910158	0	0	0	0	0	0	uncharacterized LOC104910158
LOC104910170	0	0	0	0	0	0	PHD finger protein 7-like
LOC104910171	0	0	0	0	0	0	PHD finger protein 7-like
LOC104910173	0	0	0	0	0	0	carboxymethylenebutenolidase homolog
LOC104910174	0	0	0	0	0	0	SUN domain-containing protein 3-like
LOC104910186	0	0	0	0	0	0	uncharacterized LOC104910186
LOC104910187	0	0	0	0	0	0	uncharacterized LOC104910187
LOC104910202	0	0	0	0	0	0	uncharacterized LOC104910202
LOC104910235	0	0	0	0	0	0	protein MANBAL pseudogene
LOC104910262	0	0	0	0	0	0	uncharacterized LOC104910262
LOC104910272	0	0	0	0	0	0	uncharacterized LOC104910272
LOC104910275	0	0	0	0	0	0	uncharacterized LOC104910275
LOC104910279	0	0	0	0	0	0	uncharacterized LOC104910279
LOC104910287	0	0	0	0	0	0	uncharacterized LOC104910287
LOC104910289	0	0	0	0	0	0	uncharacterized LOC104910289
LOC104910296	0	0	0	0	0	0	uncharacterized LOC104910296
LOC104910297	0	0	0	0	0	0	uncharacterized LOC104910297
LOC104910300	0	0	0	0	0	0	uncharacterized LOC104910300
LOC104910303	0	0	0	0	0	0	uncharacterized LOC104910303
LOC104910304	0	0	0	0	0	0	uncharacterized LOC104910304
LOC104910348	0	0	0	0	0	0	uncharacterized LOC104910348
LOC104910349	0	0	0	0	0	0	uncharacterized LOC104910349
LOC104910358	0	0	0	0	0	0	uncharacterized LOC104910358
LOC104910375	0	0	0	0	0	0	uncharacterized LOC104910375
LOC104910383	0	0	0	0	0	0	uncharacterized LOC104910383
LOC104910420	0	0	0	0	0	0	uncharacterized LOC104910420
LOC104910421	0	0	0	0	0	0	uncharacterized LOC104910421
LOC104910422	0	0	0	0	0	0	uncharacterized LOC104910422
LOC104910432	0	0	0	0	0	0	CUB and sushi domain-containing protein 3-like
LOC104910433	0	0	0	0	0	0	CUB and sushi domain-containing protein 3-like
LOC104910438	0	0	0	0	0	0	uncharacterized LOC104910438
LOC104910439	0	0	0	0	0	0	uncharacterized LOC104910439
LOC104910441	0	0	0	0	0	0	uncharacterized LOC104910441
LOC104910468	0	0	0	0	0	0	uncharacterized LOC104910468
LOC104910489	0	0	0	0	0	0	feather keratin 2-like
LOC104910490	0	0	0	0	0	0	feather keratin 1-like
LOC104910491	0	0	0	0	0	0	feather keratin 1-like
LOC104910492	0	0	0	0	0	0	feather keratin 1-like
LOC104910500	0	0	0	0	0	0	uncharacterized LOC104910500
LOC104910507	0	0	0	0	0	0	uncharacterized LOC104910507
LOC104910508	0	0	0	0	0	0	uncharacterized LOC104910508
LOC104910509	0	0	0	0	0	0	uncharacterized LOC104910509
LOC104910510	0	0	0	0	0	0	RNA-directed DNA polymerase from mobile element jockey-like
LOC104910519	0	0	0	0	0	0	uncharacterized LOC104910519
LOC104910524	0	0	0	0	0	0	uncharacterized LOC104910524
LOC104910545	0	0	0	0	0	0	uncharacterized LOC104910545
LOC104910586	0	0	0	0	0	0	uncharacterized LOC104910586
LOC104910597	0	0	0	0	0	0	uncharacterized LOC104910597
LOC104910598	0	0	0	0	0	0	DNA-directed RNA polymerase II subunit RPB2-like
LOC104910624	0	0	0	0	0	0	uncharacterized LOC104910624
LOC104910626	0	0	0	0	0	0	uncharacterized LOC104910626
LOC104910627	0	0	0	0	0	0	uncharacterized LOC104910627
LOC104910628	0	0	0	0	0	0	uncharacterized LOC104910628
LOC104910638	0	0	0	0	0	0	uncharacterized LOC104910638
LOC104910661	0	0	0	0	0	0	uncharacterized LOC104910661
LOC104910672	0	0	0	0	0	0	uncharacterized LOC104910672
LOC104910697	0	0	0	0	0	0	uncharacterized LOC104910697
LOC104910715	0	0	0	0	0	0	uncharacterized LOC104910715
LOC104910718	0	0	0	0	0	0	uncharacterized LOC104910718
LOC104910736	0	0	0	0	0	0	uncharacterized LOC104910736
LOC104910757	0	0	0	0	0	0	uncharacterized LOC104910757
LOC104910790	0	0	0	0	0	0	uncharacterized LOC104910790
LOC104910797	0	0	0	0	0	0	uncharacterized LOC104910797
LOC104910798	0	0	0	0	0	0	uncharacterized LOC104910798
LOC104910806	0	0	0	0	0	0	uncharacterized LOC104910806
LOC104910808	0	0	0	0	0	0	uncharacterized LOC104910808
LOC104910821	0	0	0	0	0	0	uncharacterized LOC104910821
LOC104910894	0	0	0	0	0	0	uncharacterized LOC104910894
LOC104910915	0	0	0	0	0	0	T-cell surface glycoprotein CD8 alpha chain-like
LOC104910936	0	0	0	0	0	0	uncharacterized LOC104910936
LOC104910969	0	0	0	0	0	0	olfactory receptor-like protein COR6
LOC104911035	0	0	0	0	0	0	transient receptor potential cation channel subfamily M member 5-like
LOC104911056	0	0	0	0	0	0	uncharacterized LOC104911056

LOC104911069	0	0	0	0	0	0	uncharacterized LOC104911069
LOC104911079	0	0	0	0	0	0	uncharacterized LOC104911079
LOC104911085	0	0	0	0	0	0	uncharacterized LOC104911085
LOC104911145	0	0	0	0	0	0	uncharacterized LOC104911145
LOC104911178	0	0	0	0	0	0	uncharacterized LOC104911178
LOC104911190	0	0	0	0	0	0	uncharacterized LOC104911190
LOC104911194	0	0	0	0	0	0	tetratricopeptide repeat domain 6
LOC104911197	0	0	0	0	0	0	uncharacterized LOC104911197
LOC104911237	0	0	0	0	0	0	uncharacterized LOC104911237
LOC104911238	0	0	0	0	0	0	uncharacterized LOC104911238
LOC104911239	0	0	0	0	0	0	uncharacterized LOC104911239
LOC104911258	0	0	0	0	0	0	uncharacterized LOC104911258
LOC104911300	0	0	0	0	0	0	uncharacterized LOC104911300
LOC104911303	0	0	0	0	0	0	uncharacterized LOC104911303
LOC104911304	0	0	0	0	0	0	uncharacterized LOC104911304
LOC104911319	0	0	0	0	0	0	uncharacterized LOC104911319
LOC104911332	0	0	0	0	0	0	uncharacterized LOC104911332
LOC104911336	0	0	0	0	0	0	rho GTPase-activating protein 32-like
LOC104911346	0	0	0	0	0	0	uncharacterized LOC104911346
LOC104911347	0	0	0	0	0	0	uncharacterized LOC104911347
LOC104911349	0	0	0	0	0	0	uncharacterized LOC104911349
LOC104911359	0	0	0	0	0	0	uncharacterized LOC104911359
LOC104911402	0	0	0	0	0	0	uncharacterized LOC104911402
LOC104911444	0	0	0	0	0	0	MAM and LDL-receptor class A domain-containing protein 1-like
LOC104911445	0	0	0	0	0	0	MAM and LDL-receptor class A domain-containing protein 1-like
LOC104911479	0	0	0	0	0	0	uncharacterized LOC104911479
LOC104911480	0	0	0	0	0	0	uncharacterized LOC104911480
LOC104911487	0	0	0	0	0	0	uncharacterized LOC104911487
LOC104911525	0	0	0	0	0	0	uncharacterized LOC104911525
LOC104911527	0	0	0	0	0	0	uncharacterized LOC104911527
LOC104911545	0	0	0	0	0	0	uncharacterized LOC104911545
LOC104911555	0	0	0	0	0	0	uncharacterized LOC104911555
LOC104911557	0	0	0	0	0	0	uncharacterized LOC104911557
LOC104911575	0	0	0	0	0	0	uncharacterized LOC104911575
LOC104911622	0	0	0	0	0	0	uncharacterized LOC104911622
LOC104911623	0	0	0	0	0	0	uncharacterized LOC104911623
LOC104911642	0	0	0	0	0	0	baculoviral IAP repeat-containing protein 5
LOC104911668	0	0	0	0	0	0	uncharacterized LOC104911668
LOC104911673	0	0	0	0	0	0	uncharacterized LOC104911673
LOC104911863	0	0	0	0	0	0	uncharacterized LOC104911863
LOC104911868	0	0	0	0	0	0	uncharacterized LOC104911868
LOC104911876	0	0	0	0	0	0	uncharacterized LOC104911876
LOC104911882	0	0	0	0	0	0	uncharacterized LOC104911882
LOC104911966	0	0	0	0	0	0	beta-microseminoprotein-like
LOC104911968	0	0	0	0	0	0	uncharacterized LOC104911968
LOC104911981	0	0	0	0	0	0	uncharacterized LOC104911981
LOC104911982	0	0	0	0	0	0	uncharacterized LOC104911982
LOC104911988	0	0	0	0	0	0	uncharacterized LOC104911988
LOC104912014	0	0	0	0	0	0	uncharacterized LOC104912014
LOC104912031	0	0	0	0	0	0	inactive pancreatic lipase-related protein 1-like
LOC104912072	0	0	0	0	0	0	uncharacterized LOC104912072
LOC104912130	0	0	0	0	0	0	uncharacterized LOC104912130
LOC104912136	0	0	0	0	0	0	nyctalopin-like
LOC104912161	0	0	0	0	0	0	uncharacterized LOC104912161
LOC104912166	0	0	0	0	0	0	uncharacterized LOC104912166
LOC104912170	0	0	0	0	0	0	uncharacterized LOC104912170
LOC104912178	0	0	0	0	0	0	uncharacterized LOC104912178
LOC104912192	0	0	0	0	0	0	uncharacterized LOC104912192
LOC104912230	0	0	0	0	0	0	endogenous retrovirus group K member 25 Pol protein-like
LOC104912231	0	0	0	0	0	0	igE-binding protein-like
LOC104912240	0	0	0	0	0	0	uncharacterized LOC104912240
LOC104912264	0	0	0	0	0	0	uncharacterized LOC104912264
LOC104912291	0	0	0	0	0	0	uncharacterized LOC104912291
LOC104912306	0	0	0	0	0	0	uncharacterized LOC104912306
LOC104912312	0	0	0	0	0	0	uncharacterized LOC104912312
LOC104912405	0	0	0	0	0	0	uncharacterized LOC104912405
LOC104912538	0	0	0	0	0	0	uncharacterized LOC104912538
LOC104912569	0	0	0	0	0	0	uncharacterized LOC104912569
LOC104912578	0	0	0	0	0	0	uncharacterized LOC104912578
LOC104912600	0	0	0	0	0	0	uncharacterized LOC104912600
LOC104912603	0	0	0	0	0	0	uncharacterized LOC104912603
LOC104912693	0	0	0	0	0	0	uncharacterized LOC104912693
LOC104912708	0	0	0	0	0	0	uncharacterized LOC104912708
LOC104912714	0	0	0	0	0	0	uncharacterized LOC104912714
LOC104912715	0	0	0	0	0	0	uncharacterized LOC104912715
LOC104912746	0	0	0	0	0	0	olfactory receptor 10A7-like
LOC104912808	0	0	0	0	0	0	WD repeat-containing protein 72-like

LOC104912818	0	0	0	0	0	0	homeobox protein NANOG-like
LOC104912843	0	0	0	0	0	0	uncharacterized LOC104912843
LOC104912844	0	0	0	0	0	0	uncharacterized LOC104912844
LOC104912887	0	0	0	0	0	0	uncharacterized LOC104912887
LOC104912971	0	0	0	0	0	0	uncharacterized LOC104912971
LOC104913042	0	0	0	0	0	0	uncharacterized LOC104913042
LOC104913086	0	0	0	0	0	0	taste receptor type 2 member 40-like
LOC104913137	0	0	0	0	0	0	uncharacterized LOC104913137
LOC104913145	0	0	0	0	0	0	protein FAM217B-like
LOC104913146	0	0	0	0	0	0	uncharacterized LOC104913146
LOC104913147	0	0	0	0	0	0	uncharacterized LOC104913147
LOC104913163	0	0	0	0	0	0	uncharacterized LOC104913163
LOC104913176	0	0	0	0	0	0	uncharacterized LOC104913176
LOC104913220	0	0	0	0	0	0	uncharacterized LOC104913220
LOC104913246	0	0	0	0	0	0	uncharacterized LOC104913246
LOC104913258	0	0	0	0	0	0	uncharacterized LOC104913258
LOC104913322	0	0	0	0	0	0	uncharacterized LOC104913322
LOC104913346	0	0	0	0	0	0	uncharacterized LOC104913346
LOC104913405	0	0	0	0	0	0	uncharacterized LOC104913405
LOC104913423	0	0	0	0	0	0	uncharacterized LOC104913423
LOC104913454	0	0	0	0	0	0	uncharacterized LOC104913454
LOC104913456	0	0	0	0	0	0	uncharacterized LOC104913456
LOC104913467	0	0	0	0	0	0	uncharacterized LOC104913467
LOC104913468	0	0	0	0	0	0	syntaxin-binding protein 4-like
LOC104913602	0	0	0	0	0	0	uncharacterized LOC104913602
LOC104913648	0	0	0	0	0	0	lipocalin-15-like
LOC104913662	0	0	0	0	0	0	uncharacterized LOC104913662
LOC104913708	0	0	0	0	0	0	endogenous retrovirus group K member 25 Pol protein-like
LOC104913781	0	0	0	0	0	0	uncharacterized LOC104913781
LOC104913799	0	0	0	0	0	0	uncharacterized LOC104913799
LOC104913839	0	0	0	0	0	0	deleted in malignant brain tumors 1 protein-like
LOC104913846	0	0	0	0	0	0	uncharacterized LOC104913846
LOC104913859	0	0	0	0	0	0	uncharacterized LOC104913859
LOC104913861	0	0	0	0	0	0	uncharacterized LOC104913861
LOC104913915	0	0	0	0	0	0	uncharacterized LOC104913915
LOC104913934	0	0	0	0	0	0	uncharacterized LOC104913934
LOC104913960	0	0	0	0	0	0	uncharacterized LOC104913960
LOC104913976	0	0	0	0	0	0	uncharacterized LOC104913976
LOC104913990	0	0	0	0	0	0	uncharacterized LOC104913990
LOC104914000	0	0	0	0	0	0	uncharacterized LOC104914000
LOC104914021	0	0	0	0	0	0	uncharacterized LOC104914021
LOC104914025	0	0	0	0	0	0	uncharacterized LOC104914025
LOC104914033	0	0	0	0	0	0	uncharacterized LOC104914033
LOC104914106	0	0	0	0	0	0	uncharacterized LOC104914106
LOC104914115	0	0	0	0	0	0	uncharacterized LOC104914115
LOC104914122	0	0	0	0	0	0	uncharacterized LOC104914122
LOC104914125	0	0	0	0	0	0	uncharacterized LOC104914125
LOC104914126	0	0	0	0	0	0	RNA-directed DNA polymerase from mobile element jockey-like
LOC104914220	0	0	0	0	0	0	gastrokine 1
LOC104914234	0	0	0	0	0	0	uncharacterized LOC104914234
LOC104914247	0	0	0	0	0	0	uncharacterized LOC104914247
LOC104914251	0	0	0	0	0	0	uncharacterized LOC104914251
LOC104914267	0	0	0	0	0	0	uncharacterized LOC104914267
LOC104914304	0	0	0	0	0	0	uncharacterized LOC104914304
LOC104914338	0	0	0	0	0	0	pleckstrin homology domain-containing family B member 2 pseudogene
LOC104914340	0	0	0	0	0	0	uncharacterized LOC104914340
LOC104914345	0	0	0	0	0	0	uncharacterized LOC104914345
LOC104914346	0	0	0	0	0	0	uncharacterized LOC104914346
LOC104914357	0	0	0	0	0	0	uncharacterized LOC104914357
LOC104914390	0	0	0	0	0	0	uromodulin-like 1
LOC104914415	0	0	0	0	0	0	uncharacterized LOC104914415
LOC104914418	0	0	0	0	0	0	beta-keratin-related protein-like
LOC104914419	0	0	0	0	0	0	beta-keratin-related protein-like
LOC104914420	0	0	0	0	0	0	keratin-associated protein 10-4-like
LOC104914429	0	0	0	0	0	0	uncharacterized LOC104914429
LOC104914441	0	0	0	0	0	0	uncharacterized LOC104914441
LOC104914448	0	0	0	0	0	0	Down syndrome cell adhesion molecule-like
LOC104914503	0	0	0	0	0	0	uncharacterized LOC104914503
LOC104914508	0	0	0	0	0	0	uncharacterized LOC104914508
LOC104914509	0	0	0	0	0	0	uncharacterized LOC104914509
LOC104914551	0	0	0	0	0	0	feather keratin 1-like
LOC104914572	0	0	0	0	0	0	uncharacterized LOC104914572
LOC104914610	0	0	0	0	0	0	probable G-protein coupled receptor 158
LOC104914671	0	0	0	0	0	0	uncharacterized LOC104914671
LOC104914683	0	0	0	0	0	0	mucin-16-like
LOC104914720	0	0	0	0	0	0	uncharacterized LOC104914720
LOC104914736	0	0	0	0	0	0	uncharacterized LOC104914736

LOC104914755	0	0	0	0	0	0	uncharacterized LOC104914755
LOC104914872	0	0	0	0	0	0	uncharacterized LOC104914872
LOC104914879	0	0	0	0	0	0	uncharacterized LOC104914879
LOC104914905	0	0	0	0	0	0	uncharacterized LOC104914905
LOC104914935	0	0	0	0	0	0	uncharacterized LOC104914935
LOC104914939	0	0	0	0	0	0	uncharacterized LOC104914939
LOC104914940	0	0	0	0	0	0	olfactory receptor 14A16-like
LOC104915001	0	0	0	0	0	0	zinc finger protein GLIS3-like
LOC104915040	0	0	0	0	0	0	uncharacterized LOC104915040
LOC104915125	0	0	0	0	0	0	uncharacterized LOC104915125
LOC104915145	0	0	0	0	0	0	actin-1-like
LOC104915146	0	0	0	0	0	0	actin, alpha skeletal muscle-like
LOC104915176	0	0	0	0	0	0	uncharacterized LOC104915176
LOC104915204	0	0	0	0	0	0	S-adenosylmethionine synthase isoform type-1-like
LOC104915210	0	0	0	0	0	0	maestro heat-like repeat-containing protein family member 7
LOC104915211	0	0	0	0	0	0	maestro heat-like repeat-containing protein family member 7
LOC104915212	0	0	0	0	0	0	maestro heat-like repeat-containing protein family member 7
LOC104915247	0	0	0	0	0	0	uncharacterized LOC104915247
LOC104915257	0	0	0	0	0	0	G-protein coupled receptor 98-like
LOC104915258	0	0	0	0	0	0	G-protein coupled receptor 98-like
LOC104915261	0	0	0	0	0	0	uncharacterized LOC104915261
LOC104915271	0	0	0	0	0	0	PHD finger protein 7-like
LOC104915295	0	0	0	0	0	0	uncharacterized LOC104915295
LOC104915308	0	0	0	0	0	0	uncharacterized LOC104915308
LOC104915310	0	0	0	0	0	0	uncharacterized LOC104915310
LOC104915323	0	0	0	0	0	0	uncharacterized LOC104915323
LOC104915325	0	0	0	0	0	0	tetraspanin-3-like
LOC104915373	0	0	0	0	0	0	zinc finger protein 474
LOC104915387	0	0	0	0	0	0	RNA-directed DNA polymerase from mobile element jockey-like
LOC104915414	0	0	0	0	0	0	UTP-glucose-1-phosphate uridylyltransferase-like
LOC104915417	0	0	0	0	0	0	olfactory receptor 14C36-like
LOC104915426	0	0	0	0	0	0	olfactory receptor 14A16-like
LOC104915429	0	0	0	0	0	0	olfactory receptor 14A2-like
LOC104915432	0	0	0	0	0	0	feather keratin 1-like
LOC104915433	0	0	0	0	0	0	feather keratin 1-like
LOC104915435	0	0	0	0	0	0	feather keratin 2-like
LOC104915438	0	0	0	0	0	0	uncharacterized LOC104915438
LOC104915442	0	0	0	0	0	0	T-cell surface glycoprotein CD8 alpha chain-like
LOC104915448	0	0	0	0	0	0	bestrophin-1-like
LOC104915449	0	0	0	0	0	0	uncharacterized LOC104915449
LOC104915450	0	0	0	0	0	0	ciliary neurotrophic factor-like
LOC104915452	0	0	0	0	0	0	uncharacterized LOC104915452
LOC104915453	0	0	0	0	0	0	scavenger receptor cysteine-rich domain-containing protein SCART1-like
LOC104915454	0	0	0	0	0	0	antigen WC1.1-like
LOC104915455	0	0	0	0	0	0	uncharacterized LOC104915455
LOC104915456	0	0	0	0	0	0	deleted in malignant brain tumors 1 protein-like
LOC104915464	0	0	0	0	0	0	nucleoporin-like protein 2
LOC104915467	0	0	0	0	0	0	uncharacterized LOC104915467
LOC104915473	0	0	0	0	0	0	UDP-glucuronosyltransferase 1-9-like
LOC104915474	0	0	0	0	0	0	UDP-glucuronosyltransferase 1-6-like
LOC104915475	0	0	0	0	0	0	UDP-glucuronosyltransferase 1-1 pseudogene
LOC104915476	0	0	0	0	0	0	UDP-glucuronosyltransferase 1-1-like
LOC104915477	0	0	0	0	0	0	UDP-glucuronosyltransferase 1-6 pseudogene
LOC104915478	0	0	0	0	0	0	UDP-glucuronosyltransferase 1-1-like
LOC104915482	0	0	0	0	0	0	olfactory receptor 14J1-like
LOC104915483	0	0	0	0	0	0	olfactory receptor 14A16-like
LOC104915484	0	0	0	0	0	0	olfactory receptor 14A16-like
LOC104915488	0	0	0	0	0	0	MAM domain-containing glycosylphosphatidylinositol anchor protein 1-like
LOC104915516	0	0	0	0	0	0	zinc finger protein CKR1-like
LOC104915530	0	0	0	0	0	0	olfactory receptor 14A16-like
LOC104915532	0	0	0	0	0	0	olfactory receptor 14A16-like
LOC104915534	0	0	0	0	0	0	olfactory receptor 14C36-like
LOC104915535	0	0	0	0	0	0	olfactory receptor 14J1-like
LOC104915536	0	0	0	0	0	0	olfactory receptor 14A16-like
LOC104915537	0	0	0	0	0	0	olfactory receptor 14A16-like
LOC104915540	0	0	0	0	0	0	olfactory receptor 14J1-like
LOC104915543	0	0	0	0	0	0	olfactory receptor 14C36-like
LOC104915559	0	0	0	0	0	0	nucleoporin-like protein 2
LOC104915563	0	0	0	0	0	0	uncharacterized LOC104915563
LOC104915570	0	0	0	0	0	0	olfactory receptor 14C36-like
LOC104915573	0	0	0	0	0	0	Ig heavy chain V-III region VH26-like
LOC104915575	0	0	0	0	0	0	uncharacterized LOC104915575
LOC104915578	0	0	0	0	0	0	olfactory receptor 14J1-like

LOC104915581	0	0	0	0	0	0	olfactory receptor 14A16-like
LOC104915583	0	0	0	0	0	0	uncharacterized LOC104915583
LOC104915586	0	0	0	0	0	0	sulfotransferase family cytosolic 2B member 1-like
LOC104915589	0	0	0	0	0	0	claw keratin-like
LOC104915591	0	0	0	0	0	0	claw keratin-like
LOC104915595	0	0	0	0	0	0	glucagon receptor-like
LOC104915596	0	0	0	0	0	0	claw keratin-like
LOC104915602	0	0	0	0	0	0	tyrosine-protein kinase receptor TYRO3-like
LOC104915603	0	0	0	0	0	0	claw keratin-like
LOC104915606	0	0	0	0	0	0	scale keratin-like
LOC104915609	0	0	0	0	0	0	cytochrome P450 2C19-like
LOC104915611	0	0	0	0	0	0	scale keratin-like
LOC104915613	0	0	0	0	0	0	interferon-like
LOC104915615	0	0	0	0	0	0	ATP-binding cassette sub-family A member 1-like
LOC104915617	0	0	0	0	0	0	derlin-2-like
LOC104915618	0	0	0	0	0	0	PHD finger protein 7-like
LOC104915623	0	0	0	0	0	0	uncharacterized LOC104915623
LOC104915624	0	0	0	0	0	0	uncharacterized LOC104915624
LOC104915625	0	0	0	0	0	0	uncharacterized LOC104915625
LOC104915639	0	0	0	0	0	0	uncharacterized LOC104915639
LOC104915644	0	0	0	0	0	0	chromodomain-helicase-DNA-binding protein 5-like
LOC104915649	0	0	0	0	0	0	proto-oncogene Mas-like
LOC104915654	0	0	0	0	0	0	uncharacterized LOC104915654
LOC104915665	0	0	0	0	0	0	protein cramped-like pseudogene
LOC104915667	0	0	0	0	0	0	uncharacterized LOC104915667
LOC104915674	0	0	0	0	0	0	uncharacterized LOC104915674
LOC104915679	0	0	0	0	0	0	uncharacterized LOC104915679
LOC104915684	0	0	0	0	0	0	uncharacterized LOC104915684
LOC104915685	0	0	0	0	0	0	feather keratin Cos1-1/Cos1-3/Cos2-1-like
LOC104915690	0	0	0	0	0	0	uncharacterized LOC104915690
LOC104915692							
	0	0	0	0	0	0	sia-alpha-2,3-Gal-beta-1,4-GlcNAc-R:alpha 2,8-sialyltransferase-like
LOC104915694	0	0	0	0	0	0	uncharacterized LOC104915694
LOC104915710	0	0	0	0	0	0	uncharacterized LOC104915710
LOC104915717	0	0	0	0	0	0	butyrophilin subfamily 1 member A1-like
LOC104915718	0	0	0	0	0	0	uncharacterized LOC104915718
LOC104915724	0	0	0	0	0	0	T-cell surface glycoprotein CD8 alpha chain-like
LOC104915731	0	0	0	0	0	0	feather keratin Cos1-1/Cos1-3/Cos2-1-like
LOC104915732	0	0	0	0	0	0	olfactory receptor 14J1-like
LOC104915733	0	0	0	0	0	0	uncharacterized LOC104915733
LOC104915737	0	0	0	0	0	0	kinesin-like protein KIF20B
LOC104915745	0	0	0	0	0	0	feather keratin 1-like
LOC104915746	0	0	0	0	0	0	uncharacterized LOC104915746
LOC104915747	0	0	0	0	0	0	uncharacterized LOC104915747
LOC104915750	0	0	0	0	0	0	probable peptide methionine sulfoxide reductase
LOC104915752	0	0	0	0	0	0	2-methylene-furan-3-one reductase-like
LOC104915753	0	0	0	0	0	0	glutathione S-transferase 1-like
LOC104915754	0	0	0	0	0	0	UDP-glucuronic acid decarboxylase 6-like
LOC104915755	0	0	0	0	0	0	UDP-glucose 6-dehydrogenase 1-like
LOC104915756	0	0	0	0	0	0	uncharacterized LOC104915756
LOC104915757	0	0	0	0	0	0	AT-rich interactive domain-containing protein 1A-like
LOC104915766	0	0	0	0	0	0	probable glutamine--tRNA ligase
LOC104915767	0	0	0	0	0	0	olfactory receptor 14C36-like
LOC104915777	0	0	0	0	0	0	uncharacterized LOC104915777
LOC104915802	0	0	0	0	0	0	uncharacterized LOC104915802
LOC104915803							
	0	0	0	0	0	0	trifunctional UDP-glucose 4,6-dehydratase/UDP-4-keto-6-deoxy-D-glucose 3,5-epimerase/UDP-4-keto-L-rhamnose-reductase RHM2-like
LOC104915804							
	0	0	0	0	0	0	cob(II)yrinic acid a,c-diamide adenosyltransferase, mitochondrial-like
LOC104915817	0	0	0	0	0	0	feather keratin 2
LOC104915821	0	0	0	0	0	0	DNA-(apurinic or apyrimidinic site) lyase-like
LOC104915822	0	0	0	0	0	0	DNA-(apurinic or apyrimidinic site) lyase-like
LOC104915825							
	0	0	0	0	0	0	leukocyte immunoglobulin-like receptor subfamily B member 1
LOC104915834	0	0	0	0	0	0	PHD finger protein 7-like
LOC104915850	0	0	0	0	0	0	GDP-mannose 4,6 dehydratase 2-like
LOC104915851	0	0	0	0	0	0	elongation factor G-2, chloroplastic-like
LOC104915876	0	0	0	0	0	0	putative HERV-K_Xq28 provirus ancestral Pol protein
LOC104915880	0	0	0	0	0	0	histidine protein kinase NIK1-like
LOC104915881	0	0	0	0	0	0	elongation factor G, chloroplastic-like
LOC104915882	0	0	0	0	0	0	uncharacterized LOC104915882
LOC104915883	0	0	0	0	0	0	uncharacterized LOC104915883
LOC104915888	0	0	0	0	0	0	protein aurora borealis-like
LOC104915913	0	0	0	0	0	0	probable histidinol-phosphatase
LOC104915914	0	0	0	0	0	0	lipoyl synthase, mitochondrial-like
LOC104915915	0	0	0	0	0	0	AT-rich interactive domain-containing protein 1A-like
LOC104915919	0	0	0	0	0	0	SUN domain-containing protein 3-like
LOC104915920	0	0	0	0	0	0	osteoclast-associated immunoglobulin-like receptor

LOC104915949	0	0	0	0	0	0	voltage-dependent L-type calcium channel subunit alpha-1F-like
LOC104915955	0	0	0	0	0	0	uncharacterized protein C757.03c-like
LOC104915957	0	0	0	0	0	0	rho GTPase-activating protein 11A-like
LOC104915959	0	0	0	0	0	0	nicotinamide phosphoribosyltransferase-like
LOC104916000	0	0	0	0	0	0	dihydrolipoyl dehydrogenase, mitochondrial-like
LOC104916001	0	0	0	0	0	0	translation initiation factor IF-1, chloroplastic-like
LOC104916002	0	0	0	0	0	0	glutathione S-transferase 3-like
LOC104916005	0	0	0	0	0	0	phosphoinositide 3-kinase regulatory subunit 4-like
LOC104916006	0	0	0	0	0	0	proline-rich protein 4-like
LOC104916010	0	0	0	0	0	0	keratin-associated protein 9-1-like
LOC104916027	0	0	0	0	0	0	myb-related transcription factor, partner of profilin-like
LOC104916048	0	0	0	0	0	0	uncharacterized LOC104916048
LOC104916049	0	0	0	0	0	0	probable transcriptional regulator ycf27
LOC104916050	0	0	0	0	0	0	fe(2+)/Mn(2+) transporter pcl1-like
LOC104916052	0	0	0	0	0	0	UDP-glucose 4-epimerase pseudogene
LOC104916053	0	0	0	0	0	0	elongation factor G, chloroplastic-like
LOC104916054	0	0	0	0	0	0	30S ribosomal protein S7, chloroplastic-like
LOC104916056	0	0	0	0	0	0	cell wall protein DAN4-like
LOC104916059	0	0	0	0	0	0	olfactory receptor 1411-like
LOC104916061	0	0	0	0	0	0	uncharacterized LOC104916061
LOC104916063	0	0	0	0	0	0	outer dense fiber protein 3-like
LOC104916092	0	0	0	0	0	0	amiloride-sensitive amine oxidase [copper-containing]-like
LOC104916105	0	0	0	0	0	0	homeobox protein Nkx-2.1-like
LOC104916111	0	0	0	0	0	0	voltage-dependent L-type calcium channel subunit alpha-1D-like
LOC104916127	0	0	0	0	0	0	catalase-B-like
LOC104916128	0	0	0	0	0	0	phosphoenolpyruvate carboxykinase [GTP], mitochondrial-like
LOC104916129	0	0	0	0	0	0	metal tolerance protein 8-like
LOC104916133	0	0	0	0	0	0	outer dense fiber protein 3-like
LOC104916137	0	0	0	0	0	0	uncharacterized LOC104916137
LOC104916139	0	0	0	0	0	0	platelet glycoprotein VI-like
LOC104916167	0	0	0	0	0	0	butyrophilin subfamily 1 member A1-like
LOC104916168	0	0	0	0	0	0	butyrophilin subfamily 3 member A2-like
LOC104916169	0	0	0	0	0	0	butyrophilin subfamily 3 member A2-like
LOC104916170	0	0	0	0	0	0	butyrophilin subfamily 3 member A2-like
LOC104916173	0	0	0	0	0	0	butyrophilin subfamily 2 member A1-like
LOC104916174	0	0	0	0	0	0	butyrophilin-like protein 2
LOC104916184	0	0	0	0	0	0	nacrein-like protein P1
LOC104916231	0	0	0	0	0	0	glutamine--fructose-6-phosphate aminotransferase [isomerizing]-like
LOC104916233	0	0	0	0	0	0	uncharacterized LOC104916233
LOC104916234	0	0	0	0	0	0	stomatin-like protein 2, mitochondrial pseudogene
LOC104916281	0	0	0	0	0	0	avidin-like
LOC104916284	0	0	0	0	0	0	neurogenin-1-like
LOC104916316	0	0	0	0	0	0	carbamoyl-phosphate synthase small chain, chloroplastic-like
LOC104916319	0	0	0	0	0	0	probable electron transfer flavoprotein subunit alpha, mitochondrial
LOC104916320	0	0	0	0	0	0	ATP synthase subunit alpha, chloroplastic-like
LOC104916321	0	0	0	0	0	0	HLA class II histocompatibility antigen, DM beta chain-like
LOC104916322	0	0	0	0	0	0	leukocyte immunoglobulin-like receptor subfamily A member 2
LOC104916323	0	0	0	0	0	0	G-protein coupled receptor 42-like
LOC104916329	0	0	0	0	0	0	uncharacterized LOC104916329
LOC104916330	0	0	0	0	0	0	uncharacterized LOC104916330
LOC104916331	0	0	0	0	0	0	uncharacterized LOC104916331
LOC104916334	0	0	0	0	0	0	E3 ubiquitin-protein ligase listerin-like
LOC104916343	0	0	0	0	0	0	homeobox protein SIX3 pseudogene
LOC104916362	0	0	0	0	0	0	ventral anterior homeobox 1b-like
LOC104916411	0	0	0	0	0	0	uncharacterized LOC104916411
LOC104916423	0	0	0	0	0	0	uncharacterized LOC104916423
LOC104916427	0	0	0	0	0	0	killer cell immunoglobulin-like receptor 3DL3
LOC104916428	0	0	0	0	0	0	rho GTPase-activating protein 32-like
LOC104916429	0	0	0	0	0	0	alpha-2-macroglobulin-like protein 1
LOC104916430	0	0	0	0	0	0	fibrinogen-like protein A
LOC104916431	0	0	0	0	0	0	outer dense fiber protein 3-like
LOC104916432	0	0	0	0	0	0	uncharacterized LOC104916432
LOC104916454	0	0	0	0	0	0	integrin alpha-10-like
LOC104916469	0	0	0	0	0	0	uncharacterized LOC104916469
LOC104916484	0	0	0	0	0	0	uncharacterized LOC104916484
LOC104916485	0	0	0	0	0	0	class I histocompatibility antigen, F10 alpha chain-like
LOC104916492	0	0	0	0	0	0	uncharacterized LOC104916492
LOC104916493	0	0	0	0	0	0	uncharacterized LOC104916493
LOC104916494	0	0	0	0	0	0	AT-rich interactive domain-containing protein 1A-like
LOC104916497	0	0	0	0	0	0	zinc finger protein 485-like
LOC104916501	0	0	0	0	0	0	T-cell-interacting, activating receptor on myeloid cells protein 1-like

LOC104916504	0	0	0	0	0	0	uncharacterized LOC104916504
LOC104916507	0	0	0	0	0	0	leukocyte immunoglobulin-like receptor subfamily A member 5
LOC104916510	0	0	0	0	0	0	uncharacterized LOC104916510
LOC104916514	0	0	0	0	0	0	olfactory receptor 4C3-like
LOC104916526	0	0	0	0	0	0	neurogenic differentiation factor 1
LOC104916542	0	0	0	0	0	0	homeobox protein XENK-2-like
LOC104916544	0	0	0	0	0	0	homeobox protein orthopedia-like
LOC104916546	0	0	0	0	0	0	probable peptide methionine sulfoxide reductase
LOC104916548	0	0	0	0	0	0	angiopoietin-related protein 1 pseudogene
LOC104916551	0	0	0	0	0	0	claw keratin-like
LOC104916552	0	0	0	0	0	0	claw keratin-like
LOC104916554	0	0	0	0	0	0	Ig kappa chain V-VI region NQ2-6.1-like
LOC104916555	0	0	0	0	0	0	T-cell surface glycoprotein CD8 alpha chain-like
LOC104916556	0	0	0	0	0	0	T-cell surface glycoprotein CD8 alpha chain-like
LOC104916559	0	0	0	0	0	0	uncharacterized LOC104916559
LOC104916575	0	0	0	0	0	0	olfactory receptor 14A16-like
LOC104916579	0	0	0	0	0	0	scale keratin-like
LOC104916582	0	0	0	0	0	0	scavenger receptor cysteine-rich domain-containing protein SCART1-like
LOC104916584	0	0	0	0	0	0	trypsin I-P1
LOC104916589	0	0	0	0	0	0	inositol 1,4,5-trisphosphate receptor-interacting protein-like 1
LOC104916591	0	0	0	0	0	0	uncharacterized LOC104916591
LOC104916592	0	0	0	0	0	0	interferon
LOC104916593	0	0	0	0	0	0	olfactory receptor 14J1-like
LOC104916594	0	0	0	0	0	0	feather keratin 1-like
LOC104916597	0	0	0	0	0	0	feather keratin 1-like
LOC104916598	0	0	0	0	0	0	feather keratin 1-like
LOC104916599	0	0	0	0	0	0	uncharacterized LOC104916599
LOC104916600	0	0	0	0	0	0	D(2) dopamine receptor-like
LOC104916604	0	0	0	0	0	0	uncharacterized LOC104916604
LOC104916611	0	0	0	0	0	0	olfactory receptor 14A16-like
LOC104916612	0	0	0	0	0	0	feather keratin 1-like
LOC104916614	0	0	0	0	0	0	uncharacterized LOC104916614
LOC104916620	0	0	0	0	0	0	brefeldin A-inhibited guanine nucleotide-exchange protein 2-like
LOC104916625	0	0	0	0	0	0	olfactory receptor 14J1-like
LOC104916632	0	0	0	0	0	0	feather keratin 1-like
LOC104916634	0	0	0	0	0	0	myosin-IIIa-like
LOC104916635	0	0	0	0	0	0	uncharacterized LOC104916635
LOC104916639	0	0	0	0	0	0	integrator complex subunit 2-like
LOC104916640	0	0	0	0	0	0	uncharacterized LOC104916640
LOC104916641	0	0	0	0	0	0	free fatty acid receptor 2-like
LOC104916652	0	0	0	0	0	0	olfactory receptor 510-like
LOC104916659	0	0	0	0	0	0	maestro heat-like repeat-containing protein family member 2B
LOC104916664	0	0	0	0	0	0	histone H4-like
LOC104916675	0	0	0	0	0	0	scale keratin-like
LOC104916676	0	0	0	0	0	0	AT-rich interactive domain-containing protein 1A-like
LOC104916679	0	0	0	0	0	0	olfactory receptor 14J1-like
LOC104916687	0	0	0	0	0	0	uncharacterized LOC104916687
LOC104916688	0	0	0	0	0	0	beta-citrylglytamate synthase B-like
LOC104916689	0	0	0	0	0	0	feather keratin Cos1-1/Cos1-3/Cos2-1-like
LOC104916690	0	0	0	0	0	0	keratin-associated protein 21-1-like
LOC104916695	0	0	0	0	0	0	SUN domain-containing protein 3-like
LOC104916699	0	0	0	0	0	0	uncharacterized LOC104916699
LOC104916703	0	0	0	0	0	0	free fatty acid receptor 2-like
LOC104916718	0	0	0	0	0	0	uncharacterized LOC104916718
LOC104916727	0	0	0	0	0	0	beta-keratin-related protein
LOC104916729	0	0	0	0	0	0	free fatty acid receptor 2-like
LOC104916739	0	0	0	0	0	0	olfactory receptor 4C3-like
LOC104916740	0	0	0	0	0	0	mucin-16-like
LOC104916746	0	0	0	0	0	0	olfactory receptor 14J1-like
LOC104916752	0	0	0	0	0	0	uncharacterized LOC104916752
LOC104916754	0	0	0	0	0	0	leukocyte immunoglobulin-like receptor subfamily B member 5
LOC104916755	0	0	0	0	0	0	uncharacterized LOC104916755
LOC104916756	0	0	0	0	0	0	platelet glycoprotein VI-like
LOC104916760	0	0	0	0	0	0	olfactory receptor 14J1-like
LOC104916764	0	0	0	0	0	0	feather keratin 1-like
LOC104916772	0	0	0	0	0	0	leukocyte immunoglobulin-like receptor subfamily A member 2
LOC104916773	0	0	0	0	0	0	platelet glycoprotein VI-like
LOC104916775	0	0	0	0	0	0	growth/differentiation factor 6-A-like
LOC104916778	0	0	0	0	0	0	N-(5-amino-5-carboxypentanoyl)-L-cysteinyl-D-valine synthase-like
LOC104916779	0	0	0	0	0	0	uncharacterized LOC104916779
LOC104916796	0	0	0	0	0	0	scale keratin-like

LOC104916800	0	0	0	0	0	0	solute carrier family 13 member 5-like
LOC104916802	0	0	0	0	0	0	olfactory receptor 14A16-like
LOC104916843	0	0	0	0	0	0	uncharacterized LOC104916843
LOC104916846	0	0	0	0	0	0	olfactory receptor 14A16-like
LOC104916875	0	0	0	0	0	0	uncharacterized LOC104916875
LOC104916877	0	0	0	0	0	0	uncharacterized LOC104916877
LOC104916879							
	0	0	0	0	0	0	maestro heat-like repeat-containing protein family member 7
LOC104916898	0	0	0	0	0	0	P2Y purinoceptor 8-like
LOC104916956	0	0	0	0	0	0	T-box brain protein 1-like
LOC104916974	0	0	0	0	0	0	cell wall protein DAN4-like
LOC104916977	0	0	0	0	0	0	trypsin I-P1
LOC104916982	0	0	0	0	0	0	PHD finger protein 7-like
LOC104916988	0	0	0	0	0	0	merozoite surface protein CMZ-8-like
LOC104916995	0	0	0	0	0	0	uncharacterized LOC104916995
LOC104917030							
	0	0	0	0	0	0	leukocyte immunoglobulin-like receptor subfamily A member 2
LOC104917034	0	0	0	0	0	0	olfactory receptor 14A16-like
LOC104917036	0	0	0	0	0	0	feather keratin 1-like
LOC104917045	0	0	0	0	0	0	olfactory receptor 14J1-like
LOC104917046	0	0	0	0	0	0	uncharacterized LOC104917046
LOC104917060	0	0	0	0	0	0	protein Wnt-1-like
LOC104917068	0	0	0	0	0	0	nucleoporin-like protein 2
LOC104917077	0	0	0	0	0	0	kinesin-like protein KIF20B
LOC104917079	0	0	0	0	0	0	feather keratin 3-like
LOC104917081	0	0	0	0	0	0	probable G-protein coupled receptor 158
LOC104917116	0	0	0	0	0	0	claw keratin-like
LOC104917121	0	0	0	0	0	0	feather keratin Cos1-1/Cos1-3/Cos2-1-like
LOC104917123	0	0	0	0	0	0	putative HERV-K_Xq28 provirus ancestral Pol protein
LOC104917125	0	0	0	0	0	0	olfactory receptor 14J1-like
LOC104917175							
	0	0	0	0	0	0	maestro heat-like repeat-containing protein family member 2A
LOC104917181							
	0	0	0	0	0	0	maestro heat-like repeat-containing protein family member 2B
LOC104917182							
	0	0	0	0	0	0	maestro heat-like repeat-containing protein family member 2B
LOC104917209	0	0	0	0	0	0	claw keratin-like
LOC104917214	0	0	0	0	0	0	free fatty acid receptor 2-like
LOC104917227	0	0	0	0	0	0	feather keratin Cos1-1/Cos1-3/Cos2-1-like
LOC104917228	0	0	0	0	0	0	uncharacterized LOC104917228
LOC104917230	0	0	0	0	0	0	G2/M phase-specific E3 ubiquitin-protein ligase-like
LOC104917255	0	0	0	0	0	0	feather keratin 3-like
LOC104917256	0	0	0	0	0	0	feather keratin 1-like
LOC104917257	0	0	0	0	0	0	scale keratin-like
LOC104917258	0	0	0	0	0	0	proactivator polypeptide-like
LOC104917260	0	0	0	0	0	0	uncharacterized LOC104917260
LOC104917261	0	0	0	0	0	0	feather keratin Cos1-1/Cos1-3/Cos2-1-like
LOC104917262	0	0	0	0	0	0	T-cell leukemia homeobox protein 3-like
LOC104917263	0	0	0	0	0	0	uncharacterized LOC104917263
LOC104917264	0	0	0	0	0	0	uncharacterized LOC104917264
LOC104917266	0	0	0	0	0	0	osteoclast-associated immunoglobulin-like receptor
LOC104917267	0	0	0	0	0	0	uncharacterized LOC104917267
LOC104917268	0	0	0	0	0	0	uncharacterized LOC104917268
LOC104917270	0	0	0	0	0	0	osteoclast-associated immunoglobulin-like receptor
LOC104917272	0	0	0	0	0	0	uncharacterized LOC104917272
LOC104917273	0	0	0	0	0	0	NAD(P) transhydrogenase, mitochondrial pseudogene
LOC104917274							
	0	0	0	0	0	0	succinate--hydroxymethylglutarate CoA-transferase pseudogene
LOC104917275	0	0	0	0	0	0	polypeptide N-acetylgalactosaminyltransferase 6-like
LOC104917276	0	0	0	0	0	0	heat shock protein 83-like
LOC104917278	0	0	0	0	0	0	estradiol 17-beta-dehydrogenase 8-like
LOC104917281	0	0	0	0	0	0	uncharacterized LOC104917281
LOC104917282	0	0	0	0	0	0	murinoglobulin-2-like
LOC104917284	0	0	0	0	0	0	peroxiredoxin-like protein DDB_G0282517, mitochondrial
LOC104917285	0	0	0	0	0	0	serpin B10-like
LOC104917288	0	0	0	0	0	0	interferon-like
LOC104917290	0	0	0	0	0	0	feather keratin 1-like
LOC104917292	0	0	0	0	0	0	murinoglobulin-2-like
LOC104917293	0	0	0	0	0	0	uncharacterized LOC104917293
LOC104917294	0	0	0	0	0	0	uncharacterized LOC104917294
LOC104917295	0	0	0	0	0	0	uncharacterized LOC104917295
LOC104917296							
	0	0	0	0	0	0	T-cell-interacting, activating receptor on myeloid cells protein 1-like
LOC104917299							
	0	0	0	0	0	0	leukocyte immunoglobulin-like receptor subfamily A member 6
LOC104917303	0	0	0	0	0	0	feather keratin 1-like
LOC104917307	0	0	0	0	0	0	glutamic acid-rich protein-like
LOC104917311	0	0	0	0	0	0	AT-rich interactive domain-containing protein 1A-like
LOC104917312	0	0	0	0	0	0	uncharacterized LOC104917312

LOC104917318	0	0	0	0	0	0	adenylate cyclase type 3-like
LOC104917330	0	0	0	0	0	0	ATP-dependent RNA helicase DED1-like
LOC104917331	0	0	0	0	0	0	peroxiredoxin HYR1-like
LOC104917332	0	0	0	0	0	0	uncharacterized LOC104917332
LOC104917333	0	0	0	0	0	0	uncharacterized LOC104917333
LOC104917350	0	0	0	0	0	0	probable pre-mRNA-splicing factor ATP-dependent RNA helicase prp43
LOC104917353	0	0	0	0	0	0	uncharacterized LOC104917353
LOC104917354	0	0	0	0	0	0	fibrinogen-like protein 1 pseudogene
LOC104917355	0	0	0	0	0	0	fibrinogen-like protein A
LOC104917362	0	0	0	0	0	0	forkhead box protein A1-A-like
LOC104917371	0	0	0	0	0	0	uncharacterized protein C9orf85-like
LOC104917372	0	0	0	0	0	0	E3 ubiquitin-protein ligase TRIM36-like
LOC104917374	0	0	0	0	0	0	uncharacterized LOC104917374
LOC104917375	0	0	0	0	0	0	signal recognition particle receptor subunit alpha homolog
LOC104917376	0	0	0	0	0	0	G-protein coupled receptor 42-like
LOC104917379	0	0	0	0	0	0	myosin-3-like
LOC104917380	0	0	0	0	0	0	uncharacterized LOC104917380
LOC104917382	0	0	0	0	0	0	interferon-like
LOC104917386	0	0	0	0	0	0	keratin, type I cytoskeletal 14-like
LOC104917387	0	0	0	0	0	0	feather keratin Cos1-1/Cos1-3/Cos2-1-like
LOC104917389	0	0	0	0	0	0	feather keratin 1-like
LOC104917404	0	0	0	0	0	0	uncharacterized LOC104917404
LOC104917444	0	0	0	0	0	0	uncharacterized LOC104917444
LOC104917445	0	0	0	0	0	0	endogenous retrovirus group K member 10 Pol protein-like
LOC104917447	0	0	0	0	0	0	uncharacterized LOC104917447
LOC104917449	0	0	0	0	0	0	uncharacterized LOC104917449
LOC104917451	0	0	0	0	0	0	endogenous retrovirus group K member 25 Pol protein-like
LOC104917453	0	0	0	0	0	0	uncharacterized LOC104917453
LOC104917454	0	0	0	0	0	0	uncharacterized LOC104917454
LOC104917482	0	0	0	0	0	0	RNA-directed DNA polymerase from mobile element jockey-like
LOC104917483	0	0	0	0	0	0	uncharacterized LOC104917483
LOC104917485	0	0	0	0	0	0	uncharacterized LOC104917485
LOC104917528	0	0	0	0	0	0	endogenous retrovirus group K member 11 Pol protein-like
LOC104917535	0	0	0	0	0	0	uncharacterized LOC104917535
LOC104917542	0	0	0	0	0	0	uncharacterized LOC104917542
LOC104917576	0	0	0	0	0	0	homeobox protein CDX
LOC104917589	0	0	0	0	0	0	uncharacterized LOC104917589
LOC104917592	0	0	0	0	0	0	uncharacterized LOC104917592
LOC104917597	0	0	0	0	0	0	uncharacterized LOC104917597
LOC104917609	0	0	0	0	0	0	PHD finger protein 7-like
LOC104917614	0	0	0	0	0	0	cytochrome b5 type B-like
LRRC10	0	0	0	0	0	0	leucine rich repeat containing 10
MALRD1	0	0	0	0	0	0	MAM and LDL receptor class A domain containing 1
MAR5	0	0	0	0	0	0	membrane-associated ring finger (C3HC4) 5
MBOAT4	0	0	0	0	0	0	membrane bound O-acyltransferase domain containing 4
MC2R	0	0	0	0	0	0	melanocortin 2 receptor (adrenocorticotrophic hormone)
MC3R	0	0	0	0	0	0	melanocortin 3 receptor
MSH5	0	0	0	0	0	0	mutS homolog 5
NEUROD2	0	0	0	0	0	0	neuronal differentiation 2
NHLRC4	0	0	0	0	0	0	NHL repeat containing 4
NKX2-8	0	0	0	0	0	0	NK2 homeobox 8
NOTO	0	0	0	0	0	0	notochord homeobox
NPBWR1	0	0	0	0	0	0	neuropeptides B/W receptor 1
NPFFR2	0	0	0	0	0	0	neuropeptide FF receptor 2
NPHS2	0	0	0	0	0	0	nephrosis 2, idiopathic, steroid-resistant (podocin)
NYAP2	0	0	0	0	0	0	neuronal tyrosine-phosphorylated phosphoinositide-3-kinase adaptor 2
OLIG3	0	0	0	0	0	0	oligodendrocyte transcription factor 3
OPRK1	0	0	0	0	0	0	opioid receptor, kappa 1
PDX1	0	0	0	0	0	0	pancreatic and duodenal homeobox 1
PNP	0	0	0	0	0	0	purine nucleoside phosphorylase
PQLC2L	0	0	0	0	0	0	PQ loop repeat containing 2-like
PRDM13	0	0	0	0	0	0	PR domain containing 13
QRFP	0	0	0	0	0	0	pyroglutamylated RFamide peptide
SERPINE3	0	0	0	0	0	0	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 3
SKOR2	0	0	0	0	0	0	SKI family transcriptional corepressor 2
SLC23A3	0	0	0	0	0	0	solute carrier family 23, member 3
SLC6A12	0	0	0	0	0	0	solute carrier family 6 (neurotransmitter transporter), member 12
SOX14	0	0	0	0	0	0	SRY (sex determining region Y)-box 14
SPATA16	0	0	0	0	0	0	spermatogenesis associated 16
SPX	0	0	0	0	0	0	spexin hormone
SYT4	0	0	0	0	0	0	synaptotagmin IV
TBX10	0	0	0	0	0	0	T-box 10
TM6SF2	0	0	0	0	0	0	transmembrane 6 superfamily member 2
TMEM207	0	0	0	0	0	0	transmembrane protein 207

TMPRSS2	0	0	0	0	0	0	transmembrane protease, serine 2
TRIM42	0	0	0	0	0	0	tripartite motif containing 42
TUFM	0	0	0	0	0	0	Tu translation elongation factor, mitochondrial
VENTX	0	0	0	0	0	0	VENT homeobox
VMO1	0	0	0	0	0	0	vitelline membrane outer layer 1 homolog (chicken)
VPREB3	0	0	0	0	0	0	pre-B lymphocyte 3
VSTM2A	0	0	0	0	0	0	V-set and transmembrane domain containing 2A
WDR72	0	0	0	0	0	0	WD repeat domain 72
WNT9B	0	0	0	0	0	0	wingless-type MMTV integration site family, member 9B
ZPAX	0	0	0	0	0	0	egg envelope component ZPAX
ZPBP	0	0	0	0	0	0	zona pellucida binding protein

Appendix 2. Summary of pairwise differential gene expression analysis of muscle transcriptomes. For each gene, comparisons highlighted in red are significantly up regulated (FDR p-values (< 0.05), those in green are down regulated. Comparisons with $|\text{Log}_2\text{FC}| > 2.0$ are shaded dark and those with $|\text{Log}_2\text{FC}| > 1.0$ are shaded lighter.

Gene ID	31R vs 35R		39R vs 35R		31F vs 35F		39F vs 35F		31F vs 31R		35F vs 35R		39F vs 39R	
	Log ₂ FC	p-value	Log ₂ FC	p-value	Log ₂ FC	p-value	Log ₂ FC	p-value	Log ₂ FC	p-value	Log ₂ FC	p-value	Log ₂ FC	p-value
AADAC	-0.3476	1	-1.2907	1	-0.6518	1	0.40755	1	-1.7243	0.01612	-1.4237	0.11134	0.28383	1
AAMDC	-0.0545	1	-0.4087	1	-0.4146	1	0.43389	1	-0.943	0.00168	-0.5908	0.42715	0.25297	1
AASS	-0.3291	1	-0.3114	1	-0.1361	1	0.41224	0.90449	-0.5806	0.02866	-0.7819	0.13429	-0.0534	1
ABCB4	-0.079	1	-0.8798	1	-3.2252	1	-1.4711	1	-4.7715	0.02386	-1.0736	0.85945	-1.6046	1
ABI3BP	-0.5653	1	-0.9101	1	-0.4659	1	-0.3017	1	-1.0475	0.00086	-1.1578	0.29004	-0.5423	0.68017
ACACB	0.33983	1	-3.4123	0.02966	-0.2887	1	-0.4497	1	-3.7684	6.6E-06	-3.1527	0.01421	-0.1866	1
ACAD8	0.07796	1	-0.2538	1	-0.1551	1	0.21888	1	-0.6977	0.01205	-0.4737	0.28923	0.00321	1
ACADL	-0.0907	1	-0.2362	1	-0.1207	1	0.2718	1	-0.4793	0.03687	-0.4569	0.32217	0.05495	1
ACAN	2.90553	0.32083	0.12711	1	-1.7533	1	-1.3241	0.81457	-3.0251	0.02097	1.62424	0.32217	0.14691	1
ACAT1	0.19372	1	-0.3175	1	-0.0801	1	0.07668	1	-0.6633	0.00249	-0.3977	0.42391	0.00093	1
ACKR3	0.15009	1	-0.2515	1	-0.0595	1	0.57581	0.51248	-0.6996	0.01207	-0.4967	0.42391	0.33403	1
ACLY	-0.0899	1	0.30382	1	-0.0088	1	-0.4679	0.94144	0.62843	0.02414	0.53376	0.5354	-0.2243	1
ACOX2	-0.3501	1	-0.0159	1	0.08273	1	0.61992	0.63406	-0.5472	0.15849	-0.9898	0.02863	-0.3472	1
ACSL1	0.18427	1	-0.3368	1	0.06803	1	0.11	1	-0.934	0.04996	-0.8324	0.14731	-0.3774	1
ACSL6	-0.8059	1	0.29816	1	0.01947	1	1.30296	0.03222	0.32958	0.83903	-0.4995	0.87387	0.5062	1
ACTA1	0.09051	1	-0.2752	1	-0.1405	1	0.38796	1	-0.7968	0.00214	-0.5711	0.40386	0.09161	1
ACTN2	-0.0875	1	-0.2524	1	-0.284	1	0.31518	1	-0.7912	0.00218	-0.6	0.30115	-0.0307	1
ADAM11	-0.5773	1	0.00488	1	0.07796	1	-0.37	1	-0.0553	1	-0.7132	0.69371	-1.087	0.01123
ADAM23	-0.1013	1	-0.3115	1	-0.0635	1	0.00021	1	-0.6219	0.01207	-0.6665	0.13509	-0.3513	0.97768
ADAMTS12	0.327	1	-0.3126	1	-0.3172	1	0.70643	0.32281	-1.0666	0.00248	-0.4323	0.64787	0.5939	0.2051
ADARB2	0.15526	1	0.54975	1	0.2983	1	-2.1191	0.33518	2.39407	0.0084	2.24352	0.13509	-0.4253	1
ADCK3	-0.0577	1	-0.3816	1	-0.3198	1	0.02518	1	-0.9027	0.00059	-0.6493	0.25433	-0.2359	1

ADIPOQ	-0.0801	1	-0.5022	1	0.14505	1	0.51941	0.53	-0.889	0.03429	-1.1231	0.00015	-0.0963	1
ADPRHL1	0.38954	1	-0.1534	1	-0.0217	1	0.07287	1	-0.8918	0.00083	-0.4863	0.4839	-0.2575	1
ADPRM	0.05322	1	0.23851	1	0.16648	1	0.63598	0.0188	-0.5694	0.0109	-0.6914	0.02863	-0.289	1
ADRB2	0.30635	1	-0.317	1	-0.6119	1	0.63035	0.95661	-2.0156	0.00164	-1.1067	0.20557	-0.1517	1
ADSL	-0.1203	1	-0.4467	1	-0.1354	1	0.09995	1	-0.6111	0.02078	-0.6043	0.19578	-0.0518	1
ADSSL1	-0.018	1	-0.0289	1	-0.2823	1	0.56784	0.75633	-0.8997	2.5E-05	-0.6405	0.35311	-0.044	1
AGPAT2	0.36885	1	-0.8473	1	-0.2459	1	0.36143	1	-1.4929	0.00023	-0.8916	0.1154	0.32145	1
AGPAT9	0.0553	1	-0.2259	1	-0.305	1	0.19052	1	-0.7682	0.00077	-0.4162	0.42018	0.00393	1
AGTPBP1	0.42596	1	-0.3332	1	-0.8308	1	0.89954	0.97805	-1.4765	0.04589	-0.223	1	1.00856	1
AIFM2	-0.5974	0.95327	-0.0008	1	-0.0854	1	-0.5018	0.8098	0.83525	0.01864	0.3134	0.90793	-0.1771	1
AIM1	0.43874	1	-0.2263	1	0.99225	1	-0.3714	1	1.39041	0.0102	0.82314	0.70355	0.69256	1
AK1	-0.1601	1	-0.1794	1	-0.3362	1	0.59966	0.79928	-0.7004	0.01909	-0.5305	0.47674	0.2493	1
AKAP5	-0.3486	1	0.08186	1	0.06041	1	-0.5455	0.96895	1.701	1.1E-05	1.28656	0.02491	0.66419	1
AKTIP	-0.0389	1	-0.0725	1	-0.187	1	0.15872	1	-0.4946	0.03987	-0.3557	0.56622	-0.1201	1
ALDH18A1	0.22619	1	0.58201	1	-0.2216	1	-0.3225	0.92529	0.23484	0.58687	0.67364	0.02474	-0.2241	1
ALDH1L2	-0.0579	1	-0.2818	1	-0.3495	1	-0.0194	1	-1.0727	5.7E-05	-0.7887	0.25605	-0.5239	0.72272
ALDH7A1	0.01175	1	-0.0474	1	-0.2511	1	-0.2279	1	-0.5679	0.04492	-0.3133	0.70378	-0.4858	0.48959
ANGPTL4	-0.4899	1	-1.2191	1	-0.7851	1	-0.2485	1	-1.4642	0.01088	-1.1839	0.63521	-0.1986	1
ANGPTL5	0.88891	0.73206	0.22896	1	-1.338	0.00024	-0.6977	0.25721	-1.4559	0.01609	0.75583	0.14365	-0.1647	1
ANGPTL7	0.79379	1	-0.5595	1	-1.6504	0.20688	-1.0234	0.53	-0.6559	0.7533	1.78505	0.00508	1.31685	0.46493
ANKRD28	0.31823	1	0.04784	1	-0.2348	1	-0.0407	1	-0.6636	0.01334	-0.1195	1	-0.2017	1
ANO8	-0.2674	1	-0.5235	1	-0.1617	1	0.91282	0.33518	-0.9605	0.02312	-1.0731	0.07295	0.36483	1
APEX1	-0.5964	0.97147	-0.0041	1	0.26442	1	0.10385	1	0.86351	0.03189	-0.0115	1	0.10277	1
APOA1	0.51263	1	0.08927	1	0.10492	1	-0.0534	1	-0.8138	0.01982	-0.4167	0.82896	-0.5563	1
APOBEC2	-0.0432	1	-0.1292	1	-0.5373	1	0.51405	1	-1.2682	0.0084	-0.7834	0.50787	-0.1341	1
AR	0.56668	1	-0.4502	1	0.12812	1	0.4972	0.71474	-1.0062	0.00043	-0.5765	0.54927	0.3738	1
ASB11	-0.3363	1	-0.3787	1	-0.947	1	-0.2352	1	-1.7869	0.00264	-1.1784	0.40392	-1.0358	0.73535
ASB4	-0.5228	1	-0.4058	1	-0.5861	1	0.76043	0.94414	-0.8408	0.04784	-0.7826	0.56483	0.38215	1

ASNS	0.0014	1	0.35038	1	-0.349	1	-0.7309	0.47919	0.58859	0.2029	0.93267	0.03433	-0.1448	1
ATP1B4	-0.2588	1	-0.4126	1	-0.5594	1	0.8711	0.45532	-1.1904	1.5E-05	-0.8957	0.25794	0.39028	1
ATP5D	0.21598	1	-0.0724	1	-0.0813	1	0.25679	1	-0.4855	0.03985	-0.1961	0.88287	0.1361	1
ATP5E	0.2112	1	-0.0622	1	-0.0403	1	0.30142	0.9423	-0.6046	0.00979	-0.3621	0.51627	0.007	1
ATP5H	0.13189	1	-0.0226	1	-0.121	1	0.06648	1	-0.5085	0.01748	-0.2637	0.75144	-0.17	1
ATP5I	0.18836	1	-0.4031	1	-0.3604	1	-0.1445	1	-1.0376	3.4E-05	-0.4973	0.51234	-0.2312	1
ATP5J	0.11705	1	-0.0315	1	-0.1387	1	0.19452	1	-0.5198	0.02915	-0.272	0.75144	-0.0418	1
ATP8B3	-0.183	1	0.00732	1	1.39301	0.82326	0.90977	0.94873	1.46175	0.03747	-0.1369	1	0.76532	1
B3GALT1	1.47474	0.02195	0.23091	1	0.23033	1	0.13993	1	-1.2167	0.01207	0.00641	1	-0.0735	1
B3GNT5	0.04688	1	0.11149	1	0.13386	1	-0.2853	1	0.57906	0.03677	0.48358	0.51655	0.09375	1
B4GALNT3	0.15979	1	-0.0003	1	-0.299	1	-0.097	1	-0.8905	0.00744	-0.4434	0.75144	-0.5302	0.92539
BARD1	0.18838	1	0.18875	1	0.17297	1	-0.4807	0.73457	0.64154	0.04014	0.64559	0.31008	-0.0151	1
BASP1	-0.2561	1	0.08833	1	0.20275	1	-0.18	1	0.91188	0.01174	0.44061	0.55729	0.18267	1
BCAN	0.19236	1	0.08481	1	0.71261	1	-0.6475	1	1.3377	0.03985	0.80956	0.66008	0.08327	1
BCKDHB	0.08788	1	-0.2141	1	-0.1877	1	0.0855	1	-0.7735	0.00466	-0.5067	0.49755	-0.203	1
BEGAIN	-0.3537	1	-0.7935	1	0.56064	1	1.32426	0.73921	-0.9656	0.32619	-1.8903	0.00498	0.23584	1
BEND5	0.12215	1	0.03599	1	-0.2834	1	-0.0746	1	-0.627	0.02033	-0.229	0.88287	-0.3362	1
BMP7	0.52691	0.95323	0.45156	1	-0.1629	1	-0.6029	0.53541	0.44849	0.36521	1.13085	0.00057	0.08293	1
BMPR1B	-0.6528	1	0.6745	1	0.02558	1	-0.5241	1	0.94818	0.03828	0.25309	1	-0.9381	0.58265
BNC1	1.17678	1	0.98465	1	0.90148	1	-0.6196	1	1.89448	0.01092	2.1443	0.14969	0.51359	1
BNIP3	-0.0527	1	-0.1545	1	-0.2546	1	0.37564	0.944	-0.8321	0.00265	-0.6388	0.25398	-0.1055	1
BORA	-0.0787	1	0.19677	1	0.14044	1	-0.3018	1	0.68957	0.04288	0.45955	0.49193	-0.0304	1
C20H17orf67	0.75829	1	-0.9927	1	-0.1097	1	0.46508	1	-2.392	0.04251	-1.5356	0.14365	-0.0657	1
C3H8orf22	0.71476	1	-0.8052	1	-0.7416	1	-0.0805	1	-1.9556	0.0111	-0.5035	0.92384	0.21739	1
C5H14orf2	0.22117	1	-0.3974	1	-0.0417	1	0.21379	1	-0.8461	1.2E-05	-0.5918	0.15402	0.0235	1
C5H15orf52	-0.0713	1	-0.4566	1	-0.5892	1	0.5674	0.944	-1.0578	0.00756	-0.5491	0.60807	0.48142	1
C7	0.31473	1	-1.0144	1	-0.3971	1	0.00285	1	-1.358	0.00104	-0.6588	0.66008	0.36707	1
C8G	0.51253	1	0.21406	1	-0.0461	1	0.00304	1	-1.0254	0.04023	-0.4803	0.76579	-0.6852	1

CACFD1	0.02474	1	0.29891	1	-0.2851	1	-0.4419	1	1.31755	0.05962	1.6192	0.02495	0.88287	1
CACNA1G	0.24891	1	0.54342	1	-0.4046	1	-1.2502	0.01968	0.17322	0.99825	0.80713	0.32217	-0.9661	0.75556
CACNG4	0.17777	1	0.21086	1	0.23406	1	-0.1436	1	1.22548	3.4E-05	1.16467	0.02491	0.81308	0.97785
CAMK4	0.19244	1	0.01568	1	-0.3067	1	-0.6201	0.84646	0.75365	0.17683	1.24004	0.01254	0.60635	1
CAP2	0.00541	1	-0.1059	1	-0.2039	1	0.34017	0.90159	-0.9609	2E-06	-0.7596	0.05733	-0.3081	1
CAPSL	-0.5242	1	-1.1985	1	-1.1066	1	1.46516	0.32749	-2.3746	0.00489	-1.7858	0.13094	0.89676	1
CARNS1	-0.0877	1	-0.1284	1	-0.5084	1	0.78228	0.78963	-1.0962	0.033	-0.6824	0.53792	0.22914	1
CASP6	0.07712	1	0.07652	1	0.22867	1	-0.1914	1	0.69246	0.00267	0.53106	0.34843	0.27156	1
CAT	0.06432	1	-0.2738	1	-0.0693	1	-0.1203	1	-0.6222	0.00423	-0.4989	0.35415	-0.3386	0.88954
CATIP	0.08798	1	-0.7889	1	-0.6065	1	-0.1878	1	-1.3114	0.00234	-0.632	0.73957	-0.0185	1
CCDC170	-0.2464	1	-0.2181	1	-0.0286	1	-0.6029	0.95992	-0.6136	0.10031	-0.8446	0.30902	-1.2241	0.0351
CCDC37	0.97642	0.82076	0.32738	1	0.21354	1	0.95287	0.72679	-1.4792	0.00474	-0.72	0.78514	-0.0917	1
CCDC57	0.6262	1	-0.3653	1	-0.0664	1	0.27164	1	-1.9455	0.02692	-1.2819	0.36894	-0.6253	1
CCL13	0.09757	1	-0.1696	1	-0.2773	1	0.28835	1	-0.8543	0.01005	-0.4878	0.5677	-0.024	1
CCSAP	0.32795	1	-0.2186	1	0.34262	1	0.50162	0.69674	-0.7991	0.02811	-0.8275	0.24324	-0.0972	1
CD36	0.30543	1	-0.3892	1	-0.1664	1	-0.4672	0.61367	-0.8234	0.03435	-0.3594	0.72205	-0.4319	0.94942
CD44	0.24911	1	0.15453	1	0.28304	1	-0.5036	0.60217	0.70742	0.06358	0.66084	0.0351	0.01195	1
CDC34	-0.3336	1	-0.6089	1	-0.3255	1	0.22104	1	-0.8226	0.00018	-0.8386	0.25232	-0.0055	1
CDC42EP3	-0.0202	1	-0.1257	1	-0.3536	1	0.0915	1	-0.9217	0.00355	-0.5983	0.50136	-0.373	1
CDH2	0.32973	1	0.26945	1	0.28864	1	-0.7632	0.22017	0.84465	0.01422	0.87414	0.00777	-0.1494	1
CDK12	-0.1788	1	-0.0997	1	0.11962	1	-0.1294	1	0.52569	0.02738	0.21637	0.82962	0.19476	1
CEP85	-0.1761	1	-0.352	1	-0.1046	1	0.28201	1	-0.5948	0.02133	-0.6735	0.15918	-0.0355	1
CEP97	-0.0027	1	0.28204	1	0.49839	1	0.16404	1	0.71443	0.01671	0.20451	0.96156	0.0931	1
CFD	-0.3107	1	-0.6724	1	0.033	1	0.50262	1	-1.1143	0.03216	-1.4712	0.06511	-0.293	1
CHAC1	-0.2798	1	0.44162	1	-3.1539	0.01471	-1.9474	0.63535	-1.4087	0.13367	1.46973	0.57747	-0.9233	1
CHAD	0.58973	1	-0.8203	1	-0.5134	1	0.11329	1	-1.8583	3.9E-07	-0.7617	0.35706	0.17428	1
CHODL	0.70587	0.93794	0.28716	1	-0.5387	1	-0.7789	0.07229	-0.3504	0.8057	0.88151	0.0311	-0.1771	1
CHRD	0.40053	0.96033	-0.1022	1	-0.1914	1	0.17147	1	-0.8721	0.00153	-0.2903	0.79105	-0.01	1

CHRFAM7A	-0.5287	1	-0.3834	1	0.20204	1	-0.3506	1	1.62169	0.0024	0.87856	0.7156	0.92763	1
CHST9	0.90735	0.45675	0.3412	1	-0.3225	1	-0.6266	0.51248	-1.5219	1.2E-05	-0.3039	0.96611	-1.2644	0.15169
CHTF18	0.08604	1	0.26392	1	0.22749	1	-0.2395	1	0.61806	0.01531	0.4675	0.45631	-0.0281	1
CHURC1	0.17671	1	-0.1904	1	-0.0175	1	0.24761	0.98687	-0.5267	0.02562	-0.3415	0.45325	0.10204	1
CILP2	1.6837	0.34115	0.37456	1	-2.1915	9E-07	-2.4987	1.7E-07	-2.2237	0.01677	1.63704	0.00158	-1.228	0.62354
CISD3	0.41858	0.86988	0.15386	1	-0.1561	1	-0.0008	1	-0.6292	0.01808	-0.0635	1	-0.2117	1
CKMT2	-0.3248	1	-0.1718	1	-1.0404	1	1.70657	0.58313	-1.8206	0.00048	-1.1066	0.59289	0.76435	1
CLDN19	0.64696	1	-0.4254	1	-0.1891	1	-0.0423	1	-1.0621	0.04016	-0.234	1	0.15363	1
CLEC19A	0.1268	1	-0.4572	1	-0.289	1	0.54928	0.82295	-1.3542	6.7E-05	-0.9465	0.08694	0.06653	1
CLIC5	0.20938	1	-0.0197	1	-0.0385	1	0.51258	0.86527	-0.6149	0.04102	-0.3721	0.77291	0.15919	1
CMYA5	-0.2341	1	-0.2398	1	-0.3755	1	0.23179	1	-1.0125	7.7E-05	-0.8778	0.14441	-0.4008	1
CNKSR1	0.41628	1	-0.3649	1	-0.1088	1	0.98465	0.10468	-1.5106	1.2E-05	-0.9921	0.05955	0.35817	1
COCH	0.74821	1	-0.6201	1	-0.6116	1	-0.6308	0.79603	-1.7366	0.0089	-0.382	1	-0.3987	1
COL10A1	1.64683	1	0.64416	1	-2.6187	0.00026	-1.409	0.33518	-2.213	0.20426	2.00923	0.1154	-0.0387	1
COL24A1	0.20147	1	0.02855	1	-0.52	1	-0.1728	1	-0.9511	0.01273	-0.2425	0.98657	-0.4326	1
COL4A4	0.1366	1	-0.1066	1	0.28455	1	0.30556	1	-0.9788	0.04221	-1.1382	0.09919	-0.7243	0.52206
COL8A1	0.43875	1	-0.6271	1	0.07092	1	1.07873	0.00377	-1.1503	0.01677	-0.7899	0.25626	0.92015	0.00518
COL8A2	0.88726	0.85795	0.20215	1	-1.0027	1	-0.0786	1	-1.5882	0.00466	0.29292	1	0.00875	1
COL9A1	4.45247	0.19147	-1.4584	1	-3.6619	0.53676	-3.9459	0.16258	-6.3984	0.01205	1.7401	0.58291	-0.7628	1
COQ10B	0.11108	1	-0.2075	1	-0.5105	1	0.61126	0.84437	-1.432	5.9E-07	-0.8187	0.37394	0.00125	1
CPN1	0.45568	1	0.09034	1	-0.3778	1	-0.3416	1	-0.9093	0.0361	-0.0893	1	-0.5114	1
CPQ	0.27821	1	0.08936	1	-0.197	1	0.01656	1	-0.6816	0.04128	-0.2151	0.84983	-0.2814	1
CPT1A	0.21074	1	-1.016	1	-0.1904	1	-0.2383	1	-0.9974	0.0102	-0.6074	0.7246	0.17593	1
CRAT	-0.1547	1	-0.3243	1	-0.2477	1	0.41625	0.96513	-1.0654	0.00241	-0.9793	0.11969	-0.2358	1
CREG2	0.13121	1	0.10216	1	-0.2481	1	-0.2804	1	-0.8328	0.01635	-0.4647	0.56428	-0.842	0.4561
CRELD1	0.37415	1	-0.2115	1	0.01694	1	0.38623	0.78466	-0.7686	0.00114	-0.4189	0.43635	0.18071	1
CRHR2	0.10353	1	0.12717	1	-0.2661	1	-0.2854	0.8853	-0.5142	0.03381	-0.1555	1	-0.5603	0.20054
CTDSPL	0.01197	1	-0.4474	1	-0.2042	1	-0.0555	1	-0.658	0.0087	-0.4518	0.53771	-0.0544	1

CUTA	0.1167	1	-0.4699	1	0.10417	1	0.10885	1	-0.5306	0.02974	-0.5274	0.25626	0.05787	1
DAPP1	0.07634	1	-0.116	1	-0.4678	1	-0.1128	1	-0.8092	0.03277	-0.2738	0.89666	-0.2661	1
DDR2	0.48855	1	0.62906	1	-0.1551	1	-0.4452	0.85625	0.15478	0.90906	0.79137	0.04211	-0.2774	1
DECR1	0.30131	1	-0.1622	1	-0.0891	1	-0.1439	1	-0.7086	0.00197	-0.3273	0.71474	-0.304	1
DEPTOR	-0.3389	1	-0.594	1	-0.2753	1	0.35411	0.97534	-0.9045	0.00307	-0.9772	0.13509	-0.0237	1
DFNB59	0.33627	1	0.02326	1	-0.0715	1	0.31659	1	-0.7266	0.00453	-0.3274	0.77752	-0.0273	1
DHRS7B	0.09483	1	0.0048	1	-0.0424	1	0.48423	0.56791	-0.5616	0.01681	-0.4313	0.44543	0.05172	1
DHRS7C	-0.0436	1	-0.322	1	-0.2191	1	0.19248	1	-0.6171	0.02756	-0.447	0.63131	0.06873	1
DHX32	-0.228	1	0.67981	1	0.06786	1	0.50532	1	1.23598	0.00948	0.93294	0.22173	0.76	0.99117
DHX40	0.21311	1	-0.102	1	-0.1429	1	0.02743	1	-0.5814	0.02074	-0.2348	0.79997	-0.0988	1
DLEC1	0.46067	1	0.09714	1	-1.344	1	-0.434	1	-2.6975	6.5E-05	-0.893	0.53274	-1.4313	0.07951
DNAJB4	0.27845	1	-0.1407	1	0.03981	1	0.25842	1	-0.6019	0.02355	-0.3719	0.40181	0.03176	1
DOLPP1	0.1794	1	0.04037	1	-0.149	1	0.16238	1	-0.6159	0.00381	-0.2959	0.67538	-0.1671	1
DPP7	0.05655	1	-0.1838	1	-0.204	1	0.18949	1	-0.6085	0.0441	-0.3544	0.67538	0.02139	1
DPYSL5	-0.2515	1	-0.017	1	0.31906	1	-0.9645	1	1.53514	0.00302	0.96626	0.49944	0.02415	1
DRC7	0.39207	1	-0.5021	1	-0.5666	1	0.71456	1	-0.3543	0.86813	0.60212	0.81761	1.81929	0.00221
DRP2	0.86247	0.82821	-0.6784	1	0.15364	1	0.28403	1	-1.2613	0.04128	-0.5654	0.70446	0.39637	1
DSCR3	0.03575	1	-0.0363	1	-0.3153	1	0.28564	1	-0.585	0.02232	-0.2398	0.91804	0.08589	1
DSG2	0.03071	1	1.48688	1	0.22465	1	-1.9318	0.0729	2.3318	0.04326	2.09058	0.13643	-1.3141	1
DTD2	0.03386	1	0.00668	1	-0.3214	1	-0.0651	1	-0.7092	0.00568	-0.3642	0.62048	-0.4306	0.76897
DUSP10	-0.0571	1	-0.4443	1	-0.1251	1	0.0008	1	-0.7564	0.00157	-0.6949	0.21659	-0.2482	1
DUSP23	0.09662	1	-0.2451	1	-0.1869	1	0.25656	1	-0.8313	0.00022	-0.5555	0.35284	-0.052	1
DUSP26	0.83259	0.24277	0.05085	1	0.15322	1	-0.4323	1	-0.8524	0.01205	-0.1814	1	-0.6575	1
DYRK2	0.17382	1	-0.2275	1	-0.039	1	0.11297	1	-0.5161	0.03677	-0.3129	0.60613	0.03312	1
ECHS1	0.33489	0.95746	0.01106	1	0.03322	1	0.18561	1	-0.628	0.00288	-0.3345	0.53274	-0.158	1
EEF1A2	-0.2482	1	-0.5373	1	-0.4196	1	0.33252	1	-1.0038	0.01207	-0.8389	0.14365	0.03395	1
EEPD1	-0.0009	1	-0.0095	1	-0.5806	1	-0.2026	1	-0.6649	0.01677	-0.0942	1	-0.2806	1
EIF3I	-0.0377	1	-0.1516	1	-0.1553	1	-0.0518	1	-0.5169	0.03795	-0.4081	0.44728	-0.3006	1

ELOVL6	-0.1665	1	0.61947	1	-0.0065	1	-0.3124	1	1.02231	0.01567	0.8503	0.48625	-0.0677	1
EML1	0.18967	1	-0.0982	1	-0.2639	1	0.13258	1	-0.5856	0.04659	-0.1406	1	0.09467	1
EML6	0.1465	1	-0.0232	1	-0.0513	1	0.30103	1	-0.5724	0.01334	-0.3821	0.46997	-0.0558	1
ENHO	0.56962	1	0.76293	1	-0.0617	1	-0.3084	1	0.65266	0.15189	1.27462	0.01263	0.20818	1
ENPP2	0.74692	0.34115	0.44306	1	-0.5631	1	-0.1483	1	-0.7637	0.03303	0.53845	0.43687	-0.0494	1
EPHX4	0.60213	1	0.40444	1	0.96344	1	-0.6831	1	1.62564	0.03246	1.23385	0.64429	0.14738	1
ERBB4	-0.1016	1	-0.2807	1	-0.3576	1	0.35145	1	-1.1469	0.00618	-0.8971	0.15918	-0.2546	1
ERCC6L	0.1297	1	0.19687	1	0.26108	1	-0.4835	0.71279	0.71283	0.01028	0.57006	0.38448	-0.0997	1
ERLIN1	-0.0449	1	0.06699	1	0.25098	1	0.01222	1	0.5671	0.02866	0.26026	0.80151	0.21324	1
ETNPPL	0.01252	1	-0.1051	1	-0.5219	1	0.03067	1	-1.2136	1.2E-05	-0.6849	0.43103	-0.5465	0.78661
EXD1	0.18138	1	0.18125	1	-0.3794	1	0.1027	1	-1.0298	0.03545	-0.4785	0.66008	-0.5497	0.92065
EXPH5	0.47206	1	-0.6054	1	0.59954	1	0.8931	0.72173	0.4383	0.8163	0.27692	1	1.78668	0.04363
EXTL1	0.00256	1	-0.1676	1	0.07657	1	0.08266	1	-0.5196	0.03277	-0.6045	0.09501	-0.3459	0.88954
F13A1	-0.1678	1	-0.4752	1	0.07707	1	0.04534	1	0.82908	0.00084	0.57686	0.38258	1.10329	0.21936
FABP3	1.00496	0.07098	-0.0142	1	0.0393	1	0.1982	1	-1.3429	0.00015	-0.3874	0.5936	-0.173	1
FADS2	-0.7606	0.73206	0.4829	1	0.06197	1	0.1497	1	1.04411	0.00302	0.21182	1	-0.1102	1
FAM134B	-0.3478	1	-0.4545	1	-1.3021	0.08055	-0.1732	1	-2.1601	2.5E-06	-1.2112	0.30738	-0.9284	0.81653
FAM167B	0.42099	1	0.17641	1	-0.4363	1	0.04599	1	-1.3546	0.00618	-0.5069	0.73614	-0.6254	1
FAM173B	0.52008	0.95746	0.45647	1	0.21785	1	-0.086	1	0.68064	0.05542	0.9687	0.00459	0.43471	1
FAM177A1	0.08095	1	-0.1592	1	-0.1396	1	-0.0934	1	-0.8608	0.00077	-0.65	0.12461	-0.5785	0.32564
FAM180A	1.75565	0.71885	0.16531	1	-1.8251	0.10397	-2.4972	0.00029	-2.154	0.12487	1.42079	0.07464	-1.2456	1
FAM20A	0.49999	0.80143	-0.1485	1	-0.1689	1	0.39256	1	-0.7837	0.01048	-0.1184	1	0.42193	1
FAM210B	-0.2472	1	0.4121	1	0.02551	1	-0.1392	1	0.66428	0.04464	0.38288	0.6161	-0.1622	1
FAM65B	-0.3277	1	-0.0364	1	0.36277	1	-0.1559	1	1.01607	0.00088	0.31498	0.72256	0.20476	1
FANCD2	0.14159	1	0.19192	1	0.20456	1	-0.3737	0.76259	0.55863	0.04707	0.48505	0.42715	-0.0729	1
FANCI	0.28318	1	0.3577	1	0.32952	1	-0.2509	1	0.91567	1.5E-05	0.86122	0.02863	0.25719	1
FARP1	-0.0711	1	-0.1065	1	0.21253	1	-0.2986	1	0.58536	0.00472	0.29193	0.69612	0.10737	1
FASTKD1	-0.0823	1	-0.2126	1	-0.0879	1	0.10627	1	-0.5288	0.03375	-0.5334	0.24363	-0.2064	1

FBLN5	0.07723	1	-0.2044	1	-0.441	1	-0.0735	1	-0.7599	0.00082	-0.2498	0.8192	-0.1119	1
FBXO39	0.06418	1	-0.1212	1	-0.0779	1	1.07401	0.0133	-0.6949	0.08931	-0.5594	0.66008	0.63872	0.44734
FBXO40	-0.2071	1	-0.0086	1	-0.417	1	0.59883	0.77874	-0.7134	0.0084	-0.5114	0.57407	0.09882	1
FECH	-0.4334	1	-0.0398	1	0.03561	1	-0.1119	1	0.58039	0.04957	0.10279	1	0.03639	1
FGF7	-0.0737	1	0.13066	1	0.09684	1	-0.6113	0.68453	0.76738	0.04416	0.58711	0.53771	-0.1432	1
FHL2	0.32174	1	-0.5481	1	-0.7637	1	0.15178	1	-1.2538	0.03409	-0.1775	1	0.52481	1
FHOD1	-0.1184	1	-0.3925	1	-0.4174	1	0.26977	1	-1.0884	5.9E-07	-0.7972	0.14365	-0.1307	1
FIBIN	0.86108	0.80143	0.27512	1	-0.5631	0.40077	-0.5036	0.33744	-0.6645	0.44228	0.75153	0.04106	-0.0219	1
FILIP1L	0.83684	0.4107	-0.2063	1	0.10364	1	0.46214	0.61367	-1.5306	1.1E-05	-0.8073	0.09501	-0.1346	1
FMOD	1.49756	0.18124	0.4502	1	-1.9708	0	-2.0546	3.6E-13	-1.8269	0.01167	1.62964	1.6E-13	-0.8702	0.27963
FOSL2	0.14094	1	0.18936	1	0.51365	1	-0.0894	1	1.05252	0.00011	0.66805	0.16233	0.39977	1
FOXE3	0.56168	1	-0.121	1	-1.6538	1	0.01973	1	-4.0299	0.00024	-1.7923	0.25433	-1.6231	0.85453
FOXO3	-0.051	1	-0.2739	1	-0.2529	1	-0.0176	1	-0.7775	0.00345	-0.5858	0.51444	-0.3223	1
FRMD3	-0.1011	1	-0.0103	1	-0.5011	1	0.09565	1	-0.9115	0.00208	-0.519	0.54737	-0.4074	1
FRMD5	-0.0456	1	-0.2106	1	-0.0843	1	1.00972	0.26037	-0.7793	0.00892	-0.7448	0.39515	0.47328	1
FRY	-0.2293	1	-0.2857	1	-0.1202	1	0.5601	0.64129	-0.5658	0.02537	-0.6805	0.2653	0.16801	1
FSD2	-0.1421	1	-0.152	1	-0.3195	1	0.49582	0.84005	-0.9973	6.8E-05	-0.8255	0.14365	-0.176	1
FXVD6	0.23038	1	-0.1814	1	-0.0996	1	0.32935	0.94414	-0.8542	6.8E-05	-0.5327	0.23961	-0.0184	1
GABARAPL2	-0.047	1	-0.2848	1	-0.1484	1	0.33526	1	-0.568	0.03376	-0.4744	0.41871	0.14961	1
GADL1	0.17189	1	0.68817	1	-0.2743	1	1.64402	0.0433	-0.9567	0.18334	-0.5162	0.86301	0.43748	1
GAL	0.01025	1	-0.5147	1	-0.9153	1	-0.4961	1	-1.4913	0.02074	-0.5574	0.93965	-0.5387	1
GALNT11	0.29564	1	0.19357	1	-0.1345	1	0.36284	0.65205	-0.7377	0.00153	-0.3149	0.7046	-0.1412	1
GALR3	0.50279	1	-1.424	1	0.41636	1	3.04975	0.18718	-2.5633	0.02439	-2.4905	0.29004	2.02616	0.69319
GAMT	-0.185	1	-0.2408	1	-0.4069	1	0.33734	1	-0.8709	0.02562	-0.6548	0.4098	-0.0759	1
GAPDH	-0.331	1	-0.4608	1	-0.5763	1	0.68665	0.90232	-1.0353	0.03662	-0.7953	0.4361	0.35213	1
GBAS	-0.0528	1	-0.1568	1	-0.1261	1	0.27401	1	-0.5988	0.00307	-0.5332	0.19005	-0.0993	1
GBGT1	0.08149	1	-0.0192	1	-0.1497	1	0.39129	0.8553	-0.6246	0.0078	-0.4005	0.56428	0.0134	1
GFI1B	-0.6717	1	-0.4789	1	0.92945	1	0.37975	1	1.4385	0.03616	-0.1776	1	0.68487	1

GFRA2	-0.1908	1	0.18654	1	0.09624	1	-0.2596	1	0.60893	0.02926	0.31121	0.82995	-0.1286	1
GLUL	-0.657	1	-0.6521	1	-0.5525	1	0.1983	1	-0.801	0.04589	-0.9136	0.38182	-0.0577	1
GPD1	-0.0907	1	-0.2173	1	-0.3096	1	1.09992	0.60217	-1.0662	0.02403	-0.8482	0.55856	0.46368	1
GPHN	-0.1806	1	-0.0907	1	-0.2884	1	0.44593	0.92347	-0.8725	0.02574	-0.7727	0.15712	-0.2312	1
GPR116	0.10543	1	-0.3465	1	-0.0485	1	0.37757	1	-0.9062	0.02074	-0.7629	0.08317	-0.0334	1
GPR144	-0.1705	1	0.36731	1	0.30386	1	-0.7273	0.85625	1.57922	0.00359	1.09238	0.19578	0.01005	1
GPR146	0.13104	1	-0.3605	1	-0.3918	1	-0.3919	0.87233	-0.9401	0.00082	-0.426	0.80229	-0.4531	1
GPR64	0.57315	1	-0.2316	1	-0.2632	1	-0.0724	1	-1.6097	0.00069	-0.7821	0.31864	-0.6206	1
GPR68	0.82638	1	-0.7943	1	0.37663	1	1.31373	0.73457	0.17212	1	0.60352	0.98278	2.68758	0.03803
GPRC5C	0.26117	1	-0.1821	1	-0.1104	1	-0.1565	1	-0.7278	0.03388	-0.3654	0.75144	-0.3299	1
GPRIN2	0.3336	1	0.25032	1	-0.6579	1	-1.0796	0.6608	-1.5734	0.0069	-0.5848	0.67328	-1.9118	0.06085
GPX3	0.21374	1	-0.2995	1	-0.2412	1	0.49999	0.62323	-0.8805	0.00041	-0.4331	0.51978	0.36942	1
GPX7	0.13987	1	0.20661	1	-0.594	1	-0.7797	0.17191	0.36852	0.4066	1.09545	0.00036	0.11209	1
GRAMD2	0.22916	1	-0.134	1	-0.3201	1	0.58097	0.9504	-1.017	0.00655	-0.4743	0.7732	0.2428	1
GRHPR	0.12389	1	0.22488	1	-0.379	1	-0.117	1	-0.8015	0.00103	-0.306	0.73804	-0.642	0.13168
GRIN2A	0.58296	1	0.32717	1	0.30787	1	-2.1914	0.20268	-0.951	0.23072	-0.6863	0.84841	-3.1858	0.00612
GSN	-0.416	1	-0.9254	1	-0.298	1	0.54561	0.67726	-0.9871	0.02864	-1.1148	0.07479	0.36179	1
GSTA4	0.2043	1	0.07721	1	-0.1913	1	-0.111	1	-0.5586	0.0147	-0.1722	0.94477	-0.356	0.96234
GTPBP2	0.02443	1	-0.2424	1	-0.378	1	0.08192	1	-0.7961	0.00366	-0.4036	0.63521	-0.0729	1
HES1	0.65617	0.43219	0.59654	1	-0.1135	1	-0.0563	1	0.07501	1	0.83657	0.04659	0.19242	1
HMOX1	-0.3645	1	-0.0519	1	0.27567	1	1.37348	0.02147	0.47294	0.11885	-0.1781	1	1.26028	0.03534
HPGD	-0.146	1	-0.7835	1	0.05977	1	-0.5565	1	-1.3945	0.00509	-1.6131	0.19005	-1.3782	0.36787
HSPB7	0.66059	1	-0.7655	1	-0.4168	1	-0.0789	1	-2.2171	1.1E-09	-1.1463	0.34843	-0.4501	1
HYAL1	0.47483	0.73206	-0.1892	1	0.01584	1	-0.0518	1	-0.6391	0.04097	-0.19	0.96451	-0.0468	1
IGFN1	-0.1352	1	0.34499	1	-1.3852	1	0.47713	1	-1.8395	0.00623	-0.5964	0.92894	-0.4608	1
IGSF9	0.12934	1	-0.3997	1	-0.0453	1	0.51071	0.54265	-0.7166	0.00365	-0.5503	0.23931	0.36475	0.9011
IL23A	0.40772	1	0.81248	1	-3.7341	1	-0.0454	1	-4.4781	0.04216	0.21959	1	-0.6246	1
INHA	-0.1972	1	1.05002	1	0.57464	1	0.29792	1	1.52021	0.0441	0.74021	0.73129	-0.0045	1

IP6K3	-0.0808	1	-0.3154	1	-0.2865	1	0.48656	0.48893	-0.661	0.01229	-0.4629	0.4226	0.34594	1
IRF8	-0.0018	1	-0.3579	1	-0.1182	1	0.01057	1	-0.6391	0.02	-0.5319	0.44264	-0.1575	1
ISM1	0.28488	1	-1.101	1	-1.6434	0.54527	-1.7259	0.57025	-2.2943	0.03956	-0.3835	1	-1.0009	1
ISM2	-0.3289	1	-0.1608	1	0.16247	1	0.10083	1	0.56546	0.03335	0.06357	1	0.33288	1
ITGB4	0.31144	1	-0.8054	1	-0.6946	1	0.42277	1	-1.3576	0.01655	-0.3594	0.96914	0.87346	0.70114
IVD	0.05818	1	-0.0651	1	-0.1022	1	0.41616	0.82078	-0.5606	0.01304	-0.4066	0.5354	0.07639	1
IYD	-0.3744	1	-0.7912	1	0.51742	0.99314	0.79081	0.16342	0.70619	0.14724	-0.1925	1	1.39543	4.8E-06
KBTBD11	0.35608	1	-0.207	1	-0.0274	1	0.11689	1	-0.8747	0.00043	-0.4973	0.49302	-0.1678	1
KCMF1	-0.1117	1	-8.5161	0.48549	8.66745	0.00207	9.80217	4E-06	0.64558	1	-8.5599	0.07464	9.68489	4.8E-06
KCNJ2	0.28336	1	-0.5427	1	-0.1193	1	0.22153	1	-1.1281	0.00103	-0.7334	0.13543	0.03635	1
KCNJ6	-0.0721	1	0.75995	1	-0.2937	1	0.12273	1	1.03954	0.15017	1.25321	0.02474	0.62045	1
KCNK1	0.25625	1	-0.9312	1	-0.139	1	0.86647	0.61743	-0.6697	0.67908	-0.281	1	1.52154	0.02771
KCNMA1	0.16336	1	-0.5098	1	0.11163	1	0.18734	1	-0.9157	0.00496	-0.8763	0.22062	-0.1701	1
KCNMB1	0.44162	1	-0.6628	1	-0.1993	1	0.57557	0.82704	-1.076	0.01788	-0.4416	0.86553	0.80267	0.62872
KCTD20	0.00885	1	-0.1475	1	-0.1346	1	0.12109	1	-0.5567	0.00906	-0.4228	0.48261	-0.1486	1
KCTD9	0.04165	1	0.24371	1	0.12745	1	-0.1657	1	0.50767	0.03831	0.41272	0.43545	0.00985	1
KERA	-0.2568	1	0.02074	1	0.16272	1	-0.466	1	1.1256	2E-05	0.699	0.43687	0.21715	1
KIAA1107	0.1094	1	0.08396	1	0.1603	1	-0.2217	1	0.85584	5.7E-06	0.79629	0.02491	0.49467	0.53507
KIAA1161	-0.0717	1	-0.5174	1	-0.236	1	0.287	1	-0.9748	0.00469	-0.8179	0.22391	-0.0094	1
KIAA1217	0.08502	1	-0.1872	1	-0.1678	1	0.00311	1	-0.7105	0.01975	-0.4663	0.57426	-0.2698	1
KIAA1524	0.09548	1	0.27799	1	0.11182	1	-0.5849	0.14014	0.60796	0.03673	0.58239	0.2626	-0.2747	1
KLF15	-0.0049	1	-0.4235	1	-0.2032	1	0.04582	1	-1.1026	0.04589	-0.9129	0.20379	-0.4403	1
KLF2	0.63351	0.121	0.06738	1	-0.0955	1	0.04104	1	-0.5022	0.03956	0.21896	0.87529	0.19687	1
KLHDC8B	0.73724	0.95323	-0.4018	1	0.12098	1	0.40936	1	-1.1687	0.03429	-0.5604	0.71443	0.25488	1
KLHL34	0.19639	1	-0.4907	1	-0.0555	1	-0.0563	1	0.07014	1	0.31416	0.7318	0.75419	0.00932
KLHL40	0.54405	0.98671	0.05671	1	-0.1827	1	0.01512	1	-1.0318	0.01411	-0.3142	0.69396	-0.3491	1
KLHL41	-0.3467	1	-0.5061	1	-0.4482	1	-0.2627	1	-0.8283	0.04221	-0.734	0.36458	-0.4842	1
KRT23	-0.1979	1	1.29883	1	1.09467	1	-0.9062	1	2.24524	0.02915	0.92637	0.8607	-1.2538	1

KY	-0.1619	1	-0.2535	1	0.04946	1	1.80431	0.02807	-0.7949	0.27578	-1.01	0.46099	1.04349	0.73535
LAMB2	0.16222	1	-0.2101	1	0.0434	1	0.19156	1	-0.5587	0.02996	-0.4504	0.37716	-0.0424	1
LDHD	0.19309	1	-0.0874	1	-0.0986	1	0.37115	0.79268	-0.5209	0.0344	-0.2372	0.81414	0.2239	1
LIFR	0.40856	0.87453	-0.084	1	-0.1518	1	0.04411	1	-0.8118	0.00082	-0.2598	0.75567	-0.1253	1
LINGO2	0.25514	1	0.47442	1	0.27317	1	-1.4944	0.02251	1.2803	0.18524	1.24371	0.40386	-0.712	1
LMO7	0.12003	1	-0.1678	1	-0.3065	1	-0.0507	1	-0.9221	0.00324	-0.5042	0.54076	-0.3809	1
LMOD2	0.086	1	-0.4216	1	-0.2444	1	-1.0876	0.09287	-0.8993	0.05979	-0.5794	0.75144	-1.2339	0.01528
LMOD3	0.07951	1	-0.0884	1	-0.3327	1	0.49203	1	-0.7495	0.01174	-0.3434	0.86752	0.23956	1
LNPEP	-0.5444	1	-0.7988	1	-0.7273	1	-0.2908	1	-1.4363	0.03216	-1.2678	0.24061	-0.7478	1
LOC100303663	-0.3952	1	-1.1248	1	-1.4805	0.88919	0.4082	1	-2.6104	0.00176	-1.5339	0.41163	-0.0014	1
LOC100303669	-0.0171	1	-7.8414	1	8.18765	0.06154	8.96462	5.9E-05	0.74439	0.99791	-7.8859	0.14941	8.84603	7.7E-05
LOC100538587	-0.8324	0.84573	-0.3052	1	-0.0063	1	0.41626	0.88075	1.23584	6.7E-05	0.40601	0.89498	1.12943	2.8E-07
LOC100538694	0.14714	1	-0.1225	1	-0.1177	1	0.10937	1	-0.5817	0.00481	-0.3254	0.62168	-0.0891	1
LOC100538976	0.0388	1	-0.9681	0.02237	-0.255	1	0.17952	1	-1.0848	0.05539	-0.7974	0.21828	0.34826	1
LOC100539006	-1.2438	0.09798	-0.6277	1	0.70094	1	0.9445	0.47457	1.61316	6.6E-06	-0.3465	0.96541	1.23574	0.15302
LOC100539194	1.20194	0.96033	1.39016	1	-1.8507	0.20987	-1.2398	0.04698	-1.1118	0.48156	1.94407	0.01209	-0.6892	1
LOC100539298	0.76632	0.62919	0.55402	1	-0.588	1	0.16095	1	-1.1768	0.0178	0.16969	1	-0.22	1
LOC100539447	-0.741	0.71282	-0.3766	1	0.80662	1	0.83036	0.58313	0.83124	0.01939	-0.7301	0.51936	0.48616	1
LOC100539493	-0.2345	1	-0.3431	1	-0.0901	1	0.68277	0.21994	-0.7969	0.00248	-0.9489	0.03212	0.08043	1
LOC100539580	0.14619	1	-5.8546	1	6.49351	0.40077	6.85339	0.00387	0.85855	0.96864	-5.8978	0.40264	6.73705	0.00443
LOC100539604	0.57615	1	0.86515	1	2.88717	1	4.34436	0.01694	0.66435	0.90145	-1.8003	0.80341	1.81196	0.71377
LOC100539646	0.59877	1	-0.8798	1	-0.9544	1	-0.3417	1	-2.3969	0.00283	-0.8509	0.60613	-0.3023	1
LOC100539663	-0.073	1	-0.0033	1	-0.3975	1	0.7422	0.71789	-1.1477	0.01207	-0.8285	0.32217	-0.082	1
LOC100539753	-0.449	1	-0.2677	1	0.43057	1	0.37348	0.88365	1.15539	3E-06	0.26472	0.97166	0.91087	0.5446
LOC100539819	0.04156	1	-0.3823	1	-0.2203	1	-0.0783	1	-0.631	0.01466	-0.3794	0.68566	-0.0698	1
LOC100539830	-0.5014	0.58459	-0.5005	1	-0.0167	1	0.07438	1	-0.2636	0.51227	-0.7583	0.0257	-0.1743	1
LOC100539846	2.93639	1	-2.5962	1	5.9396	0.82326	7.24822	0.00194	0.59684	1	-2.6362	0.97166	7.13155	0.00246
LOC100539934	-0.1757	1	-0.4988	1	-0.2183	1	0.04938	1	-0.7739	0.03216	-0.7387	0.19332	-0.1831	1

LOC100540007	0.20874	1	-0.7409	1	0.07948	1	0.60649	0.53283	-0.4719	0.32975	-0.3533	0.75091	0.99916	0.04844
LOC100540049	-0.2346	1	-0.4959	1	-0.1363	1	0.05024	1	-1.1798	1.1E-05	-1.2886	0.00459	-0.7343	0.36019
LOC100540238	-0.727	0.91226	-0.3934	1	-0.0343	1	0.07397	1	-0.5424	0.46154	-1.2454	0.01997	-0.7743	0.97722
LOC100540334	-0.1233	1	-0.4314	1	-0.0757	1	0.36529	0.84315	-0.7803	0.02493	-0.8367	0.08735	-0.035	1
LOC100540451	0.14501	1	0.33023	1	0.30998	1	0.18347	1	0.62273	0.02527	0.44861	0.49605	0.30931	1
LOC100540511	-0.5754	1	-0.8161	1	-0.8206	0.48438	-0.1278	1	-1.2547	0.03695	-1.0236	0.32217	-0.3184	1
LOC100540610	-0.354	1	-0.7635	1	0.66989	1	0.48823	1	-2.6436	0.02053	-3.6793	0.00062	-2.3986	0.21003
LOC100540839	-0.421	1	-0.5	1	-0.5956	0.85555	0.58661	0.87211	-1.0556	0.00402	-0.8889	0.31313	0.20056	1
LOC100540871	-1.474	1	1.55899	1	-1.9941	1	-1.4511	0.88709	2.37963	0.00018	2.91859	0.12682	-0.047	1
LOC100540939	-0.0957	1	0.29153	1	-0.0363	1	-0.1641	1	0.68841	0.01659	0.62212	0.14629	0.17303	1
LOC100541121	0.16282	1	-0.3003	1	0.35008	1	0.95347	0.20843	0.04305	1	-0.1553	1	1.10577	0.03832
LOC100541200	-0.1228	1	-0.1453	1	-0.2146	1	0.09013	1	-0.8277	0.04012	-0.7488	0.42715	-0.5022	1
LOC100541207	0.27074	1	-0.4509	1	-0.0734	1	-0.1077	1	-0.6186	0.02331	-0.2836	0.85945	0.06352	1
LOC100541391	-0.0795	1	-0.2918	1	-0.2387	1	0.26723	1	-0.8658	0.01466	-0.7157	0.33147	-0.1513	1
LOC100541451	-1.1441	1	-0.0354	1	1.36909	0.5404	2.17045	0.03912	1.56858	0.15138	-0.938	0.44489	1.26502	0.88518
LOC100541529	-0.3589	1	-0.9372	1	0.01413	1	0.64685	0.58677	-1.0096	0.02414	-1.3893	0.01773	0.20209	1
LOC100541679	-0.3319	1	-1.1533	1	0.6175	1	0.02563	1	-2.1414	0.00621	-3.0956	1.2E-05	-1.9173	0.18831
LOC100541865	-0.5325	1	0.17895	1	-0.2622	1	1.54133	0.02251	-0.7045	0.20176	-0.9771	0.45325	0.38205	1
LOC100541881	-0.4464	1	-0.1415	1	-1.2446	0.00802	-1.2801	0.00253	-0.4511	0.61723	0.33656	0.91533	-0.7901	0.89157
LOC100541961	-0.4704	1	-1.1033	1	-0.1784	1	0.42078	1	-1.5011	0.01466	-1.7992	0.19883	-0.2652	1
LOC100541969	-0.096	1	-0.0828	1	-0.2364	1	0.38717	1	-0.7353	0.02331	-0.6029	0.36427	-0.1284	1
LOC100542090	-2.4675	0.09798	-0.2922	1	2.3068	4.2E-09	3.44781	2.1E-11	0.97782	0.02479	-3.7814	0.003	-0.0518	1
LOC100542292	0.13385	1	-0.1075	1	-0.202	1	0.4718	1	-1.0504	0.00015	-0.7218	0.25749	-0.1421	1
LOC100542320	0.41809	1	-0.6625	1	0.43018	1	0.55148	0.91072	-1.1488	0.00028	-1.1686	0.05152	0.0585	1
LOC100542484	-0.0267	1	0.1602	1	0.19232	1	-0.2077	1	0.58102	0.01332	0.3523	0.5354	-0.0079	1
LOC100542660	-0.4227	1	-2.1613	1	0.12626	1	2.27194	0.18718	-0.6949	0.83234	-1.26	0.60934	3.14292	0.03183
LOC100542733	-0.2045	1	-1.0977	1	-0.3992	1	-0.0649	1	-1.6473	0.00077	-1.461	0.19005	-0.4212	1
LOC100542866	-0.5791	1	-0.2959	1	-0.0163	1	0.66011	0.49302	-1.6801	0.03065	-2.247	0.00049	-1.2842	0.38744

LOC100543005	-0.0395	1	-0.3146	1	-0.4322	1	-0.282	1	-0.831	0.004	-0.4466	0.64896	-0.4087	1
LOC100543059	-0.0533	1	0.27347	1	0.15662	1	-0.5819	0.91779	0.8239	0.04445	0.60272	0.66188	-0.2473	1
LOC100543282	0.12554	1	0.24603	1	-0.239	1	0.67748	1	-1.6502	0.00195	-1.3057	0.39779	-0.8627	1
LOC100543297	-0.126	1	0.60507	1	0.14682	1	-0.2311	1	1.09414	0.00212	0.81372	0.13002	-0.0119	1
LOC100543330	1.3439	0.09798	0.18014	1	0.8894	0.28988	0.18096	1	-0.8735	0.02676	-0.43	0.89474	-0.4199	1
LOC100543404	-0.0427	1	-0.353	1	-0.1242	1	0.50564	0.32281	-0.7129	0.00793	-0.6404	0.21806	0.22475	1
LOC100543419	0.34692	1	-1.0134	0.48549	-0.3544	1	0.02161	1	-1.2257	0.01071	-0.5293	0.7246	0.50013	1
LOC100543500	0.16933	1	0.13108	1	0.04391	1	0.14005	1	0.64993	0.01588	0.76423	0.00822	0.77986	0.20956
LOC100543544	-1.2834	0.99487	-2.2523	1	-0.9127	1	1.72078	0.31132	0.14853	1	-0.2067	1	3.72973	0.00147
LOC100543589	-0.8919	1	-10.844	0.35698	5.78265	0.09766	6.99854	0.0001	-0.5816	1	-7.3035	0.10976	9.96701	4.8E-06
LOC100543749	-0.1273	1	-1.3332	1	-1.1523	1	-0.1114	1	-1.3911	0.00541	-0.3824	1	0.84228	1
LOC100543969	1.00488	0.29278	0.01235	1	-0.4962	1	-0.2216	1	-0.9808	0.00906	0.51221	0.62261	0.28039	1
LOC100544043	-0.5449	1	0.07591	1	-0.5097	1	-0.5873	0.85328	1.11229	0.03119	1.07131	0.32764	0.41227	1
LOC100544107	0.37854	1	0.16842	1	0.14681	1	0.65723	0.42818	-0.716	0.00878	-0.4921	0.66008	-0.0022	1
LOC100544113	-4.987	0.70371	2.04738	1	-2.1886	1	-1.3699	1	5.94071	6.6E-12	3.23211	0.30786	-0.1403	1
LOC100544159	0.12781	1	-6.7655	1	7.16531	0.10182	7.53525	0.00046	0.64699	1	-6.8103	0.25433	7.41819	0.00065
LOC100544169	-0.2717	1	-7.6356	0.68708	8.89722	0.0002	10.0454	1.4E-06	0.62752	1	-8.6956	0.07464	9.0761	3.7E-06
LOC100544170	0.44586	1	-0.0895	1	0.00563	1	-0.1174	1	-0.825	0.04766	-0.3935	0.82896	-0.412	1
LOC100544198	0.15254	1	-0.2937	1	0.62231	0.3112	0.7837	0.01357	-0.798	0.00356	-1.275	1.5E-06	-0.1938	1
LOC100544436	-0.5906	1	-0.6161	1	-0.3046	1	-0.2845	1	-1.9841	0.00069	-2.2864	0.14969	-1.9399	0.00836
LOC100544450	-0.4641	1	0.0451	1	0.40583	1	0.19537	1	1.0488	0.00347	0.16443	1	0.32367	1
LOC100544528	0.18749	1	-3.5744	1	5.97086	0.1861	7.47616	0.0003	-0.2101	1	-6.4244	0.38504	5.04287	0.00443
LOC100544628	0.06016	1	-5.8251	1	5.89548	0.82326	6.57425	0.01027	0.36976	1	-5.8713	0.36458	6.45943	0.01103
LOC100544881	-0.0948	1	-0.5859	1	0.39652	1	0.72226	0.53283	-0.475	0.45607	-0.9718	0.04176	0.3377	1
LOC100544896	0.81044	0.9837	-0.154	1	0.09753	1	-0.2211	1	-0.9792	0.00042	-0.278	1	-0.3341	1
LOC100545053	-0.3519	1	-0.5645	1	-0.2371	1	-0.0177	1	-0.9178	0.02243	-1.0422	0.11673	-0.4877	0.88533
LOC100545080	0.14699	1	-0.8632	1	-0.2159	1	-0.2415	1	-1.5574	0.0008	-1.2071	0.05733	-0.5783	0.93038
LOC100545322	-0.1345	1	-0.508	1	0.05763	1	1.16305	0.03351	-0.2302	0.94887	-0.4284	0.96683	1.24709	0.07641

LOC100545343	-0.1883	1	-0.1427	1	0.21959	1	-0.0435	1	0.53001	0.04016	0.11149	1	0.2185	1
LOC100545397	-0.0802	1	-0.3054	1	-0.0822	1	0.55256	0.81457	-0.7332	0.00758	-0.7398	0.13509	0.12221	1
LOC100545741	0.07156	1	-0.2955	1	-0.0398	1	0.14078	1	-0.5769	0.01738	-0.4742	0.34321	-0.0326	1
LOC100545816	-0.2927	1	-0.197	1	0.51578	1	0.1116	1	1.08474	0.00039	0.26406	1	0.58276	0.69576
LOC100545914	-0.0381	1	-8.6428	0.63292	7.98269	0.00028	9.5738	6.7E-07	-0.0085	1	-8.0684	0.0975	10.1208	2.2E-06
LOC100545931	-0.2536	1	0.17975	1	-0.4498	1	0.74539	0.92294	-2.0172	0.00195	-1.8193	0.15918	-1.2587	0.3035
LOC100546066	0.22954	1	0.07153	1	-0.22	1	0.54659	0.70737	-0.8647	0.01365	-0.4174	0.71253	0.05676	1
LOC100546123	0.36033	1	0.4333	1	-0.0199	1	-1.0285	0.85255	-1.0791	0.24099	-0.7251	0.7606	-2.1693	0.00924
LOC100546217	0.04317	1	-0.7701	1	-0.7192	1	0.71251	1	-2.8747	0.03441	-2.0685	0.55497	-0.5933	1
LOC100546220	1.09022	1	-1.2178	1	-0.4517	1	0.94417	1	-1.3285	0.29836	0.21052	1	2.35954	3E-05
LOC100546225	0.57181	1	-0.3207	1	-0.7526	1	0.92302	1	-1.5442	0.00714	-0.2251	1	1.01301	0.92542
LOC100546539	0.31132	1	-0.3952	1	0.24287	1	1.39751	3.2E-05	-0.6843	0.1266	-0.623	0.53917	1.17139	0.01218
LOC100546590	0.06879	1	0.22864	1	0.25047	1	-0.3261	1	0.92162	0.0476	0.73288	0.14365	0.19019	1
LOC100546836	-0.0075	1	-0.314	1	-0.8233	1	0.60162	1	-1.6923	4.4E-08	-0.8809	0.40392	0.03364	1
LOC100546989	0.17908	1	-0.5826	1	0.12049	1	0.70245	0.6608	-1.1289	0.00764	-1.0789	0.19883	0.21694	1
LOC100547151	-0.8564	0.92697	-2.2858	0.06628	0.4743	1	0.6346	1	-0.4512	0.58627	-1.7957	0.04061	1.13147	0.73811
LOC100547252	-1.3112	0.19147	-0.8447	1	0.8253	1	0.98072	0.47919	1.72996	9.9E-06	-0.4227	0.94701	1.41299	0.1621
LOC100547404	-1.2056	0.85795	-0.6925	1	1.01347	1	1.57159	0.30073	1.69503	0.01037	-0.5348	0.9628	1.73736	0.13505
LOC100547680	-2.3678	0.26859	0.86614	1	0.21594	1	0.15623	1	3.22648	3E-08	0.67876	0.93386	-0.0286	1
LOC100547689	-0.2957	1	-0.7828	1	-0.2126	1	0.571	1	1.34416	0.03635	1.2653	0.45677	2.60106	0.00227
LOC100547843	-0.1829	1	-0.3073	1	-0.1235	1	0.56938	0.58208	-0.6311	0.00568	-0.698	0.14969	0.18213	1
LOC100547893	-0.4366	1	0.34353	1	0.10871	1	0.0088	1	0.89681	0.00311	0.33904	0.80627	0.01195	1
LOC100548098	0.29727	1	-0.1218	1	-0.1062	1	0.13029	1	-0.6257	0.00323	-0.2309	0.83482	0.02583	1
LOC100548306	0.32222	1	-0.0832	1	-0.1084	1	0.24218	1	-0.6278	0.00517	-0.2054	0.91068	0.1231	1
LOC100548372	-0.2713	1	-9.1269	0.4474	9.31286	0.00024	10.1411	2.6E-06	0.84216	0.98383	-9.1706	0.05925	10.0233	3.7E-06
LOC100548376	-0.264	1	-4.4918	0.35698	4.97528	0.00111	5.95235	6.2E-06	0.64349	0.97193	-4.6041	0.0432	5.82698	1.4E-05
LOC100548422	-0.9608	0.7691	-0.5941	1	0.74518	1	0.61294	1	1.55958	1.8E-07	-0.1578	1	1.05833	0.92008
LOC100548433	0.57092	1	1.28651	1	-0.0524	1	5.08293	0.03593	-3.0853	0.28068	-2.3842	0.5354	1.53118	1

LOC100548480	-0.1657	1	-0.518	1	-0.2872	1	0.17568	1	-0.8072	0.00474	-0.6929	0.20582	0.00596	1
LOC100548579	-0.2889	1	0.27133	1	0.17756	1	-1.1665	0.92462	2.55862	0.00134	2.09248	0.22391	0.67556	1
LOC100548654	0.18894	1	-0.1695	1	-0.0531	1	0.44388	0.50669	-0.5682	0.02773	-0.3324	0.66008	0.28352	1
LOC100548707	0.03776	1	0.10713	1	-1.0485	0.14896	-1.2343	0.00237	-0.875	0.06284	0.20159	1	-1.1302	0.03832
LOC100548716	-0.2297	1	0.09138	1	0.55105	1	0.06273	1	1.0452	0.00173	0.25184	0.92647	0.23004	1
LOC100548787	-0.0384	1	-0.2845	1	-0.1957	1	0.33282	0.95089	-0.7621	0.01728	-0.6138	0.30786	0.00832	1
LOC100548859	-0.0056	1	-0.1978	1	-0.1688	1	0.25781	1	-0.5832	0.03673	-0.4288	0.60463	0.03042	1
LOC100548946	1.10615	0.82821	0.56653	1	-1.3715	0.0002	-1.4906	6.2E-06	-0.9034	0.44353	1.56267	9.3E-08	-0.4902	0.76105
LOC100548974	-0.574	1	-2.9133	0.71564	0.13981	1	-0.8678	0.94873	-2.5932	0.00356	-3.3393	0.06152	-1.2824	0.26615
LOC100548989	-0.0954	1	-0.1726	1	0.05567	1	0.18273	1	-0.476	0.04993	-0.6365	0.05269	-0.275	1
LOC100549055	0.48681	1	0.5784	1	0.50118	1	-0.5361	1	1.96995	0.00092	1.95053	0.05404	0.83925	0.74846
LOC100549073	0.14587	1	-0.2548	1	-0.0989	1	0.22876	1	-0.5667	0.01261	-0.3292	0.61801	0.15787	1
LOC100549134	0.25534	1	-0.0156	1	-0.2317	1	0.6094	0.69674	-1.135	8.4E-09	-0.6523	0.45211	-0.0287	1
LOC100549160	-0.523	1	-1.0982	1	-0.5935	1	0.19394	1	-1.5668	0.00297	-1.5033	0.28628	-0.21	1
LOC100549393	-0.1286	1	0.08025	1	0.23274	1	-0.25	1	0.81638	0.00773	0.44482	0.57526	0.1232	1
LOC100549460	0.57505	1	-0.5148	1	-0.0947	1	-0.3254	1	-1.1987	0.006	-0.5346	0.78145	-0.3474	1
LOC100549463	0.28648	1	0.14102	1	-0.1016	1	-0.0819	1	-0.7496	0.04996	-0.3666	0.92294	-0.591	0.71854
LOC100549590	1.56313	0.19147	1.08944	1	-0.7248	0.99315	-1.3188	0.0433	-0.4994	0.745	1.75576	0.0004	-0.6436	1
LOC100549832	-0.2894	1	-0.6166	1	-0.2158	1	0.33338	0.94711	-0.8595	0.01561	-0.9408	0.11969	0.01476	1
LOC100549945	0.01551	1	-0.1447	1	-0.2003	1	0.46539	0.90159	-0.7657	0.00321	-0.5559	0.3381	0.05492	1
LOC100550376	-0.0555	1	-0.2349	1	-0.1235	1	0.29472	0.94137	-0.5791	0.02016	-0.5188	0.2647	0.01458	1
LOC100550412	-0.1031	1	-0.7257	1	-0.4787	1	0.00769	1	-1.3272	0.03362	-0.9605	0.32296	-0.218	1
LOC100550448	-0.2459	1	-0.7099	1	-0.2248	1	0.30621	1	-0.8168	0.03203	-0.8471	0.28807	0.17695	1
LOC100550693	-0.0419	1	-0.6528	1	0.7418	1	1.33934	0.87444	-2.999	0.02172	-3.7856	2E-08	-1.7557	0.13188
LOC100550711	0.12198	1	0.24726	1	-0.5043	1	0.92797	0.79268	1.07448	0.10245	1.69335	0.05173	2.37273	0.00016
LOC100550721	0.37613	1	-0.6739	1	-0.103	1	0.25982	1	-1.2173	0.00014	-0.7457	0.32375	0.19041	1
LOC100550847	0.35431	1	-8.6618	0.48549	8.92849	0.01211	9.84175	3E-06	0.29474	1	-8.7059	0.06871	9.72482	4.3E-06
LOC100550954	-0.0428	1	-0.2124	1	-0.2633	1	0.20642	1	-0.7986	0.007	-0.589	0.55729	-0.1637	1

LOC100550977	-0.1173	1	0.02977	1	0.25473	1	0.431	0.92124	0.58598	0.04251	0.20093	1	0.60729	0.68017
LOC100551023	0.95302	1	-1.7346	0.44966	-0.7057	1	0.87358	1	-3.1853	0.00077	-1.5336	0.31261	1.0504	0.88954
LOC100551072	-1.3955	0.09798	-0.345	1	0.81866	1	0.97793	0.5293	2.15453	2.4E-10	-0.0743	1	1.25801	0.31321
LOC100551088	0.27034	1	-0.812	1	0.34176	1	1.19932	0.00194	-0.5326	0.33775	-0.6087	0.68181	1.40697	4.8E-06
LOC100551229	-0.0649	1	0.10604	1	0.31565	1	-0.2575	1	0.73001	0.00541	0.33974	0.84371	-0.0156	1
LOC100551326	-0.5831	1	0.08864	1	-0.268	1	-1.0284	0.6583	1.09201	0.00821	0.77014	0.58723	-0.3362	1
LOC100551394	0.23998	1	-0.5264	1	0.09007	1	0.08982	1	-0.8459	0.00547	-0.7056	0.15918	-0.0848	1
LOC100551442	0.3457	1	-0.2974	1	0.34788	1	0.87107	0.28683	-0.7517	0.03635	-0.759	0.05733	0.41072	1
LOC104909224	0.23666	1	0.32152	1	0.23225	1	-0.3239	1	0.91138	0.03423	0.90553	0.0567	0.26919	1
LOC104909228	-0.164	1	0.8563	1	0.22419	1	0.46091	1	-2.1653	0.17301	-2.5615	0.0975	-2.8832	0.00575
LOC104909236	-0.0039	1	-0.1809	1	-0.2801	1	-0.0037	1	-0.5478	0.04824	-0.2806	0.82896	-0.0967	1
LOC104909252	-0.5525	0.80143	0.6435	1	-0.3719	1	-0.1282	1	1.01753	0.00018	0.82906	0.11198	0.06181	1
LOC104909266	0.0915	1	-1.244	0.51786	-0.3114	1	0.89691	0.20493	-1.0287	0.01688	-0.6312	0.55856	1.5171	0.00276
LOC104909279	-0.0818	1	-0.4483	1	-0.0513	1	0.0601	1	-0.9664	5.6E-05	-1.0052	0.05173	-0.4913	0.86399
LOC104909282	-0.518	1	-0.816	1	-0.9937	1	0.12817	1	-1.8913	0.0069	-1.4388	0.25473	-0.4685	1
LOC104909291	-0.9286	0.80143	-0.115	1	-0.5509	1	-0.5893	0.85274	1.09423	0.01072	0.71221	0.60213	0.24198	1
LOC104909300	-0.9373	1	1.32721	1	3.25779	1	3.3008	0.54037	3.80683	0.01254	-0.5213	1	1.5703	1
LOC104909318	0.23241	1	-1.1157	1	-0.4914	1	0.75951	0.39868	-1.4634	1.1E-06	-0.746	0.46201	1.13575	0.062
LOC104909322	0.00141	1	-1.3529	0.34923	-0.3646	1	0.81306	0.28884	-1.3772	0.00307	-1.0173	0.13509	1.15657	0.08113
LOC104909332	-0.9765	0.87453	0.20853	1	-1.0388	1	0.69596	1	-2.0339	0.07194	-1.9824	0.0128	-1.473	0.9011
LOC104909345	1.13264	0.71885	-0.351	1	0.14228	1	-0.089	1	-1.5041	0.02111	-0.5215	0.95246	-0.2462	1
LOC104909351	0.44919	1	0.20893	1	-0.079	1	-0.3384	1	-1.0237	0.0382	-0.5087	0.68485	-1.0467	0.22222
LOC104909392	0.03018	1	0.68753	1	0.09224	1	-0.6141	0.95002	1.21087	0.02796	1.15199	0.15918	-0.1497	1
LOC104909415	-0.97	0.52822	-0.092	1	0.52813	1	0.04325	1	1.59037	0.00141	0.06861	1	0.21564	1
LOC104909501	-0.369	1	0.25543	1	-0.3478	1	-2.0253	0.82301	-1.7826	0.45374	-1.7859	0.21798	-4.0182	0.02869
LOC104909502	-0.4848	1	0.08451	1	1.53841	1	0.06778	1	-1.1962	0.62796	-3.2329	0.01841	-3.2169	7.5E-05
LOC104909718	-0.3203	1	-1.2592	1	0.7986	0.82326	0.92368	0.37918	0.79137	0.23453	-0.3388	1	1.85186	0.0001
LOC104909794	-0.1445	1	-0.5378	1	-0.208	1	-0.0952	1	-0.9824	0.0005	-0.9294	0.11641	-0.4799	0.74239

LOC104909838	-0.0244	1	-0.1508	1	-0.3344	1	0.74227	0.64129	-0.974	0.00522	-0.6686	0.35311	0.22519	1
LOC104909859	0.57337	1	0.52494	1	0.24766	1	0.05984	1	1.04159	0.03375	1.3442	0.02302	0.89417	0.73811
LOC104909916	0.12469	1	-0.2618	1	-0.1994	1	0.2244	1	-0.8979	6.7E-05	-0.5815	0.30786	-0.0913	1
LOC104909961	-0.019	1	-0.0997	1	-0.213	1	0.39116	0.96082	-0.652	0.03283	-0.4666	0.51627	0.02905	1
LOC104910021	-0.1604	1	-0.1621	1	0.34795	1	-0.003	1	0.74138	0.01782	0.22051	0.95515	0.38901	1
LOC104910081	0.79912	1	-0.8126	1	-3.2034	1	-1.4385	1	-5.1846	0.03385	-0.6425	1	-1.2411	1
LOC104910097	-0.6556	1	-1.2541	1	-0.2804	1	0.55946	0.99284	-1.3414	0.00926	-1.7236	0.03553	0.09512	1
LOC104910156	0.76367	0.93794	-0.5883	1	-0.4942	1	-0.3992	1	-1.5099	0.00041	-0.2609	1	-0.0562	1
LOC104910193	-0.1247	1	-6.1278	1	6.04434	0.59035	7.36964	0.0006	0.40904	1	-6.1716	0.35415	7.25302	0.0008
LOC104910223	-0.6013	1	-0.2069	1	0.3241	1	-0.46	1	1.22877	0.00222	0.28862	0.99202	0.04546	1
LOC104910280	0.44955	0.48909	0.11705	1	-0.1588	1	0.16526	1	-0.502	0.04023	0.09717	1	0.15092	1
LOC104910346	0.15018	1	-0.7568	1	-1.3075	1	-0.239	1	-1.7812	0.00846	-0.3311	1	0.1965	1
LOC104910360	1.60127	1	2.94047	0.6956	-3.7596	0.20219	-1.9449	0.85274	-1.6358	0.38983	3.73895	0.02436	-1.1537	1
LOC104910372	1.17146	1	0.81521	1	-2.6531	0.01471	-2.926	0.00467	-1.9022	0.24715	1.89709	0.05214	-1.8431	0.84988
LOC104910388	-0.4776	1	-0.5044	1	-0.4374	1	0.65966	0.6608	-1.0317	0.03631	-1.0791	0.17733	0.08994	1
LOC104910394	-0.2962	1	-0.3218	1	0.55185	1	0.56306	0.68453	1.06401	0.00117	0.20226	1	1.09239	0.08772
LOC104910405	0.3677	1	-2.2679	1	-0.9514	1	-0.7205	1	-3.5619	0.00854	-2.2225	0.45264	-0.6659	1
LOC104910407	-0.3957	1	-1.2296	1	0.16429	1	0.59805	0.79268	0.73709	0.8057	0.16778	1	2.00237	0.00276
LOC104910410	0.09216	1	0.33612	1	0.37993	1	0.07939	1	0.73864	0.03509	0.44116	0.67436	0.18475	1
LOC104910446	0.6095	1	0.12597	1	-0.6592	1	-0.3238	1	-1.8549	0.0084	-0.5891	0.82962	-1.0184	0.99504
LOC104910453	-0.3446	1	-0.2185	1	0.79325	1	0.41178	1	1.68174	0.01826	0.54074	0.97407	1.16803	0.30671
LOC104910484	1.4216	0.41795	1.62549	0.14246	-1.5139	0.10397	-0.6369	0.82295	-1.1754	0.23968	1.74776	0.00294	-0.5096	1
LOC104910511	0.18277	1	0.57211	1	-0.5913	1	-0.254	1	0.68419	0.62927	1.44646	0.04873	0.62324	1
LOC104910515	0.84187	1	-1.5614	1	0	1	1.64043	1	-4.6095	0.03677	-3.6376	0.63804	-0.0229	1
LOC104910533	-0.344	1	-0.1209	1	-0.4276	1	-0.0932	1	-0.7863	0.01459	-0.7104	0.27785	-0.6749	0.52206
LOC104910620	-0.3756	1	0.36818	1	0.29313	1	0.90111	0.04698	0.93092	0.10253	0.2587	0.95246	0.79472	0.42456
LOC104910702	1.08737	0.78368	0.13223	1	-1.207	1	-2.3995	0.02402	-1.3566	0.16533	0.90617	0.44543	-1.6115	0.86982
LOC104910737	-1.3721	0.65339	-1.2984	1	-0.0362	1	-0.8728	0.58313	-0.8557	0.31243	-2.2009	0.03095	-1.7645	0.00226

LOC104910807	1.01476	1	-0.1722	1	4.03823	1	4.02132	0.56356	-1.8092	0.07555	-5.2435	0.03614	-0.5041	1
LOC104910814	-0.1503	1	0.82703	1	0.26853	1	-0.1396	1	1.39193	0.00011	0.96041	0.09814	-0.025	1
LOC104910818	1.42461	0.41795	0.83903	1	-0.7919	1	-0.5567	1	-1.9692	0.02441	0.2451	1	-1.1654	1
LOC104910825	3.43452	0.13543	-2.2857	1	0.21466	1	0.63095	0.95765	0.99403	0.66635	4.11982	1.3E-13	6.88358	9.3E-17
LOC104910922	0.36553	1	0.24267	1	-0.4537	1	0.36044	1	-1.2077	0.02041	-0.3935	0.91822	-0.2706	1
LOC104911020	-6.5484	0.03507	-7.2675	0.23819	2.83496	0.07388	2.07675	0.41067	0.51419	0.92421	-8.9399	0.01306	0.47307	1
LOC104911024	-0.0492	1	-0.2051	1	-0.3935	1	-0.0341	1	-0.8605	4.1E-05	-0.5269	0.32217	-0.3473	0.97421
LOC104911034	-1.4941	0.97865	-0.8272	1	1.3442	1	1.13908	1	2.47618	0.01239	-0.3834	1	1.57664	1
LOC104911166	-0.6298	1	0.19124	1	-1.2017	0.19288	0.02689	1	-1.1511	0.03137	-0.5843	0.70235	-0.7466	1
LOC104911183	-1.0767	1	-0.3833	1	0.48242	1	-0.2292	1	2.862	2.5E-06	1.2955	0.38504	1.43589	0.82113
LOC104911250	0.2342	1	0.36141	1	0.21529	1	0.08961	1	1.16131	0.03551	1.17341	0.0311	0.90411	0.52206
LOC104911278	-0.9617	1	0.06475	1	1.44392	1	0.16975	1	0.742	0.46874	-1.6712	0.23931	-1.569	0.01953
LOC104911330	0.1886	1	-0.5835	1	-0.6492	1	-0.1614	1	-1.3938	0.03341	-0.5602	0.89603	-0.1294	1
LOC104911538	0.80379	0.93794	0.44011	1	0.04452	1	-0.121	1	0.92478	0.11068	1.67325	0.0004	1.11549	0.45792
LOC104911578	0.08895	1	-0.6142	1	-0.8948	1	0.06256	1	-2.1701	0.00103	-1.1979	0.43687	-0.5075	1
LOC104911619	0.00346	1	0.36189	1	1.21216	1	0.76442	1	1.58999	0.00818	0.36159	1	0.79368	1
LOC104911627	-0.9376	1	0.85078	1	-0.2903	1	-0.0178	1	3.32508	0.00118	2.59437	0.04173	1.7377	0.81352
LOC104911731	0.11903	1	0.1674	1	-0.4096	1	0.72486	0.76618	-1.2003	0.00091	-0.6773	0.44113	-0.1198	1
LOC104911744	0.36775	1	0.06548	1	-0.0875	1	0.84047	0.20268	-1.2019	5.1E-05	-0.7544	0.09919	0.02161	1
LOC104911799	-0.0287	1	0.13912	1	0.42037	1	-0.4379	1	1.12087	0.00655	0.65892	0.43345	0.08981	1
LOC104911826	0.1569	1	0.39918	1	0.55401	1	-0.3082	1	1.10707	0.03648	0.69768	0.5388	-0.0024	1
LOC104911839	-1.4299	1	0.61166	1	-0.1544	1	-0.6589	1	2.09065	0.02078	0.81752	0.86692	-0.4755	1
LOC104911902	-0.2787	1	-0.3339	1	-0.1341	1	0.7656	0.64129	-1.2694	0.00204	-1.4224	0.0975	-0.3222	1
LOC104911920	0.09505	1	-0.0313	1	-0.3145	1	0.23433	1	-0.6443	0.00476	-0.2419	0.94097	0.02694	1
LOC104912064	0.06154	1	0.46283	1	0.29391	1	0.01355	1	0.71601	0.03868	0.47364	0.66008	0.03518	1
LOC104912085	0.35921	1	-1.0915	1	-0.4974	1	0.76644	1	-2.65	5.1E-05	-1.7957	0.16361	0.0643	1
LOC104912133	-0.3344	1	0.23602	1	0.33249	1	0.34662	0.94711	0.79282	0.01785	0.11373	1	0.23124	1
LOC104912179	-0.0852	1	-0.4851	1	-0.2906	1	0.26662	1	-0.6651	0.00574	-0.4675	0.51651	0.2876	1

LOC104912188	0.01738	1	0.04975	1	0.09266	1	0.09979	1	0.60893	0.02414	0.52526	0.11969	0.58082	0.10167
LOC104912259	0.32128	1	0.05667	1	0.11253	1	-0.3927	1	-1.5564	0.02308	-1.3634	0.07613	-1.8012	0.00924
LOC104912273	0.42951	1	0.13907	1	-1.5202	1	0.10291	1	-2.2087	0.00222	-0.2603	1	-0.2882	1
LOC104912276	-0.2265	1	-0.1585	1	-0.4548	1	0.68567	0.83786	-0.9327	0.00416	-0.7108	0.44543	0.13405	1
LOC104912286	-2.8973	0.73154	-2.7507	1	-0.3525	1	-0.0407	1	4.06442	5.1E-07	1.53696	0.71253	4.13867	0.00023
LOC104912287	-0.0042	1	-0.0688	1	-0.188	1	0.23447	1	-1.3622	3.5E-08	-1.1856	0.00814	-0.8776	0.06428
LOC104912332	-0.1175	1	-0.4349	1	-0.1632	1	0.56552	0.51815	-1.0368	0.02111	-1.0007	0.08884	0.00404	1
LOC104912343	-0.223	1	0.44654	1	0.03045	1	0.05715	1	0.67037	0.03889	0.40604	0.66008	0.02325	1
LOC104912368	0.6675	1	0.39961	1	-1.1066	1.8E-05	-1.298	1.3E-09	-1.2773	0.04194	0.482	0.35255	-1.208	2.8E-06
LOC104912381	0.08658	1	-0.2449	1	-0.2124	1	0.4716	0.84969	-1.065	0.00073	-0.7744	0.18204	-0.0553	1
LOC104912434	-0.0786	1	-0.1119	1	-0.1759	1	0.29583	1	-0.8422	0.00937	-0.7507	0.38812	-0.3413	1
LOC104912520	0.58433	1	0.79395	1	-0.5123	1	0.03508	1	-2.3984	0.00109	-1.3074	0.23961	-2.0147	0.42724
LOC104912585	0.93165	0.00992	0.50363	1	-0.1414	1	-0.3098	0.96808	-0.8371	0.00373	0.225	0.84331	-0.5855	0.98818
LOC104912650	-0.1201	1	-0.1971	1	-0.395	1	0.31734	1	-1.0443	0.00537	-0.7749	0.45211	-0.257	1
LOC104912671	0.27838	1	0.29377	1	-1.5489	1	0.51104	1	-2.4909	0.00826	-0.6865	0.95436	-0.4202	1
LOC104912685	0.76896	1	1.47604	1	0.32978	1	-2.1154	0.18718	1.37474	0.04492	1.7908	0.0975	-1.7995	0.68831
LOC104912722	0.24508	1	0.4597	1	0.79781	1	-0.3995	1	2.1006	0.03681	1.52307	0.44543	0.64706	1
LOC104912749	0.00696	1	-0.0798	1	-0.2103	1	0.26386	1	-0.8545	0.00253	-0.6447	0.35833	-0.298	1
LOC104912824	-0.1576	1	-0.2283	1	-0.3901	1	0.00019	1	-0.7559	0.00092	-0.5321	0.35833	-0.2975	1
LOC104912858	0.55511	1	0.57662	1	0.50766	1	-1.442	0.00289	1.10147	0.09169	1.1467	0.2486	-0.8791	1
LOC104912931	-0.4285	1	-0.3289	1	-0.1316	1	-0.004	1	-0.6173	0.17285	-0.924	0.02681	-0.5947	0.7528
LOC104912932	-1.2402	0.51018	-0.4577	1	-0.2594	1	0.11936	1	-0.5577	0.5641	-1.5486	0.02592	-0.9664	0.62872
LOC104912983	0.04069	1	-0.2183	1	-0.1737	1	0.26986	1	-0.922	0.00878	-0.7152	0.22391	-0.2238	1
LOC104913033	-0.1228	1	-0.1829	1	0.1729	1	-0.0561	1	0.53599	0.03242	0.23095	0.7969	0.36342	1
LOC104913056	0.90533	1	-2.3215	1	-0.0524	1	0.88141	1	-3.4691	0.01724	-2.4945	0.5803	0.72547	1
LOC104913075	0.49648	1	-0.4732	1	-0.2977	1	-0.0442	1	-1.8725	5.6E-05	-1.0864	0.11768	-0.6602	0.46171
LOC104913166	0.66189	1	0.31928	1	0.33765	1	-1.0745	0.82295	1.40072	0.02017	1.71374	0.03364	0.34457	1
LOC104913168	-0.2791	1	-0.3283	1	-0.3162	1	1.16216	0.17977	-1.988	1E-05	-1.9552	0.00158	-0.4667	1

LOC104913281	0.6485	1	0.031	1	-0.2051	1	-0.2494	1	-0.9114	0.02313	-0.0651	1	-0.3452	1
LOC104913298	0.30623	1	-1.0307	1	-1.0254	1	-1.3188	0.7426	-2.0148	0.00896	-0.6927	0.83129	-0.9643	1
LOC104913340	0.3452	1	0.12645	1	-1.4191	1	-0.1104	1	-1.7875	0.00153	-0.0384	1	-0.2616	1
LOC104913365	0.05737	1	-0.2516	1	-0.4522	1	0.12824	1	-1.0242	0.00967	-0.5217	0.68115	-0.1384	1
LOC104913366	-0.6846	1	-0.0758	1	0.62179	1	0.16484	1	1.12107	0.01469	-0.2043	1	0.07562	1
LOC104913386	0.55099	1	0.17359	1	-0.5032	1	0.41644	1	-1.43	0.04288	-0.3738	1	-0.1355	1
LOC104913466	-0.066	1	0.16034	1	0.34904	1	-0.2078	1	0.70368	0.00752	0.27764	0.79943	-0.0833	1
LOC104913496	0.25954	1	0.35771	1	0.39632	1	0.07718	1	0.64729	0.03681	0.50277	0.54162	0.22637	1
LOC104913497	-0.9264	1	0.01677	1	0.31475	1	-0.2199	1	1.8528	0.0334	0.60122	1	0.35573	1
LOC104913523	0.06927	1	0.45616	1	0.16319	1	0.53747	0.45291	0.91165	0.06314	0.81492	0.32217	0.90182	0.01723
LOC104913538	0.08588	1	0.57112	1	-0.5003	1	-1.9081	0.49302	-1.8729	0.05642	-1.2806	0.19034	-3.7529	2.4E-09
LOC104913724	-0.2521	1	-0.3796	1	-0.0116	1	0.55377	0.53827	-0.8096	0.01033	-1.0575	0.03132	-0.1205	1
LOC104913727	0.08259	1	0.03656	1	-0.2688	1	-0.539	0.64129	0.59075	0.18421	0.9297	0.03515	0.3639	1
LOC104913729	0.13601	1	0.12144	1	0.2008	1	1.29485	0.04029	-2.2261	0.00094	-2.297	1.2E-05	-1.117	0.27963
LOC104913730	-0.2746	1	0.29931	1	0.31099	1	-0.8281	1	2.29153	0.00215	1.69423	0.14365	0.58253	1
LOC104913731	0.27014	1	-0.7649	1	0.89582	0.3112	0.05279	1	-0.872	0.09013	-1.5079	0.01404	-0.6812	0.55641
LOC104913734	-0.3357	1	-0.5851	1	-0.1445	1	0.79249	0.69779	-1.32	0.05808	-1.5168	0.04176	-0.1376	1
LOC104913777	0.52568	1	0.13729	1	-0.1244	1	0.4833	1	-1.9768	0.00347	-1.3352	0.14365	-0.9892	0.45017
LOC104913779	0.5743	0.95323	-0.6514	1	0.03897	1	-0.0656	1	-1.2956	1.8E-07	-0.77	0.32217	-0.1768	1
LOC104913857	0.21288	1	-0.1435	1	-0.2246	1	0.10848	1	-0.5346	0.0191	-0.1044	1	0.15155	1
LOC104913900	-0.1322	1	-0.2931	1	-0.581	1	2.14497	0.10474	-2.7158	0.00014	-2.2594	0.02673	0.19229	1
LOC104913929	0.10963	1	-0.1021	1	-0.4224	1	0.26169	1	-0.8078	0.02256	-0.283	0.93195	0.08516	1
LOC104913932	0.06146	1	0.09219	1	-0.1483	1	0.21598	1	0.6052	0.04462	0.80979	0.21275	0.93611	0.02529
LOC104913952	-0.7327	1	-0.8853	1	-1.2038	1	0.97193	1	-2.0712	0.04767	-1.5813	0.39459	0.28661	1
LOC104913953	0.1196	1	-0.2933	1	-0.2968	1	0.57914	0.77154	-1.1688	2.5E-06	-0.7562	0.33822	0.11558	1
LOC104913967	0.1448	1	-0.2173	1	-0.3358	1	0.52584	0.73921	-1.1733	8.9E-06	-0.6994	0.11462	0.04753	1
LOC104914226	-1.8008	0.48226	-1.2617	1	0.59257	1	-1.0675	1	-1.3758	0.36778	-3.782	0.03206	-3.4784	0.10257
LOC104914288	-0.2488	1	-0.1757	1	0.05302	1	0.96006	0.03351	-0.3818	0.48551	-0.686	0.5354	0.4479	1

LOC104914301	0.37688	1	0.14673	1	0.09863	1	-0.1947	1	0.92986	0.0377	1.19552	0.02863	0.86388	0.63794
LOC104914309	-0.6606	0.93245	0.15976	1	0.04095	1	-0.2947	1	1.42331	0.00016	0.7123	0.35415	0.26539	1
LOC104914320	-0.098	1	-0.0029	1	0.21901	1	-0.2038	1	0.62616	0.00297	0.2995	0.62344	0.10506	1
LOC104914344	0.11891	1	-0.3559	1	-0.4008	1	0.42714	1	-1.2057	0.04464	-0.6953	0.62108	0.09723	1
LOC104914411	-0.5534	1	-0.127	1	-0.2434	1	0.02277	1	1.28112	0.00105	0.9571	0.25794	1.12106	0.09031
LOC104914412	-0.5118	1	-0.0443	1	0.21712	1	-0.1669	1	-1.0371	0.36346	-1.771	0.03553	-1.8848	0.04042
LOC104914628	-0.0414	1	-1.4658	1	-1.2508	1	2.54023	0.32281	-3.6245	5.6E-11	-2.4083	0.09624	1.58854	0.94942
LOC104914660	0.39765	1	-0.6221	1	-0.418	1	0.36853	1	-1.7535	0.00019	-0.9448	0.42081	0.04598	1
LOC104914735	-1.3695	1	-6.8798	1	6.04434	0.59035	6.8747	0.0217	0.9126	0.95816	-6.9226	0.28257	6.75589	0.02614
LOC104914843	0.09568	1	-5.2252	1	4.85929	1	6.13681	0.02131	-0.1213	1	-5.2704	0.4542	6.0239	0.02424
LOC104914844	0.27717	1	-5.4214	1	6.03553	0.50488	6.34417	0.02131	0.69512	1	-5.4652	0.45211	6.22631	0.02264
LOC104914945	0.34409	1	0.06278	1	-0.4591	1	-0.0148	1	-0.8054	0.00638	-0.0105	1	-0.0834	1
LOC104914987	-0.223	1	0.02874	1	0.78432	1	0.20782	1	1.21739	0.01308	0.19901	1	0.38798	1
LOC104914990	0.23212	1	0.6631	1	-0.4285	1	-0.6332	0.70678	0.45782	0.53735	1.1104	0.01658	-0.1719	1
LOC104915009	-0.5179	1	-0.9196	1	3.60549	0.1423	3.92173	0.01357	0.35773	1	-3.7866	0.06089	1.06082	1
LOC104915077	0.77122	1	-0.7751	1	0.48904	1	2.07389	0.04896	-1.5165	0.01469	-1.2293	0.5354	1.62456	0.33133
LOC104915190	0.07003	1	-5.974	1	6.12238	0.5733	7.13469	0.00399	0.44562	1	-6.0172	0.38744	7.01623	0.00496
LOC104915197	0.25381	1	0.00218	1	-0.2065	1	0.15221	1	-0.7892	0.00037	-0.3388	0.5677	-0.1826	1
LOC104915335	0.99166	1	1.59051	1	-1.4666	1	1.54315	0.82295	0.30366	1	2.83027	0.01913	2.71491	0.41758
LOC104915357	-0.333	1	0.43648	1	-0.1741	1	-0.511	1	1.73177	0.09719	1.5505	0.04575	0.6114	1
LOC104915377	0.06357	1	0.00101	1	-0.3264	1	-0.0905	1	-0.7037	0.00475	-0.321	0.62604	-0.4068	0.60922
LOC104915386	-0.3967	1	-7.446	1	7.26359	0.18055	8.16928	0.00025	0.59396	1	-7.4893	0.20152	8.05359	0.0003
LOC104915436	0.11623	1	-11.787	0.35698	8.13189	0.00119	9.69502	1.3E-06	0.04993	1	-8.0262	0.13509	12.8968	6.4E-08
LOC104915519	-0.4282	1	-0.5604	1	0.77619	1	-1.6525	0.95661	-1.6486	0.19943	-2.8671	0.04211	-3.9177	0.14671
LOC104915525	-1.1408	0.40297	0.1135	1	-0.7235	1	-0.5287	0.99233	1.35191	0.00028	0.93196	0.32375	0.29121	1
LOC104915526	0.80948	0.21372	-0.1408	1	0.1229	1	0.2213	1	-1.0137	0.00966	-0.3385	0.69535	0.0312	1
LOC104915551	-0.4511	1	-6.7702	1	6.3827	0.38371	7.54776	0.00027	0.43819	1	-6.8145	0.25794	7.43205	0.00034
LOC104915659	-1.4702	1	0.81217	1	3.16039	1	2.4154	0.80457	3.45477	0.00998	-1.2262	0.99341	0.46888	1

LOC104915725	-2.654	0.96529	-4.9884	1	-0.3098	1	-1.4172	1	2.93396	0.04545	0.45558	1	3.45864	1
LOC104915744	-0.7332	1	-0.6773	1	1.16868	1	0.39197	1	0.02894	1	-1.8709	0.0351	-0.808	1
LOC104915749	0.01931	1	-8.7358	0.48549	9.12844	5.9E-05	9.56834	5.1E-06	0.75738	0.99871	-8.7793	0.06986	9.45119	6.1E-06
LOC104915765	-0.3153	1	-0.8047	1	-0.7975	1	0.08022	1	-2.0151	1.8E-05	-1.5423	0.04873	-0.6417	1
LOC104915780	0.84008	1	-4.4143	1	7.43043	0.10182	8.03259	0.00037	0.5231	1	-6.4823	0.3046	6.32604	0.00221
LOC104915857	0.0278	1	0.35641	1	0.64381	1	0.42082	1	0.65939	0.03119	0.0367	1	0.10831	1
LOC104915871	-0.0453	1	0.17256	1	0.25251	1	0.25472	1	-0.6576	0.12051	-0.9618	0.00905	-0.8746	0.08368
LOC104915872	0.13909	1	0.19461	1	0.04915	1	0.14453	1	-0.7966	0.00076	-0.7161	0.09713	-0.7618	0.18453
LOC104915899	-0.1651	1	-0.548	1	0.01042	1	0.62016	0.63934	-0.7781	0.01531	-0.9609	0.03433	0.20995	1
LOC104915925	0.30306	1	-7.401	1	7.91534	0.01471	8.52578	0.00014	0.59144	1	-7.4447	0.19981	8.40823	0.00018
LOC104915954	0.27006	1	0.16814	1	-0.3158	1	0.25994	1	-1.1736	2.5E-05	-0.5972	0.26574	-0.499	0.75556
LOC104915974	-0.4497	1	-7.1125	1	7.06362	0.16704	7.62829	0.00102	0.77745	0.99029	-7.1573	0.21779	7.51155	0.00141
LOC104915986	-0.462	1	-1.0498	1	-0.7845	1	0.45429	1	-1.4933	0.03207	-1.1691	0.53771	0.33444	1
LOC104915990	-1.0514	0.64438	-0.8032	1	1.04457	1	1.0292	0.80457	1.7634	0.0009	-0.3498	0.9903	1.4863	0.54501
LOC104916015	-0.2533	1	0.14505	1	0.12054	1	-0.1943	1	0.73117	0.00029	0.34838	0.63823	0.01688	1
LOC104916025	-0.3671	1	-0.4953	1	-0.0596	1	0.09627	1	-0.7625	0.00248	-1.0781	0.00452	-0.4812	1
LOC104916026	0.06827	1	-0.0524	1	0.0061	1	0.57125	0.57025	-0.6747	0.0024	-0.6196	0.1881	0.00571	1
LOC104916047	0.0782	1	-0.3371	1	-0.2743	1	-0.1856	1	-0.7817	0.02891	-0.4371	0.60277	-0.2781	1
LOC104916113	-0.5091	0.71885	-0.4369	1	0.13956	1	0.37259	0.94643	-0.356	0.24923	-1.0132	0.007	-0.1985	1
LOC104916180	0.33536	1	0.22476	1	0.40926	1	-0.4865	0.81358	0.75485	0.02856	0.67096	0.45054	-0.0375	1
LOC104916196	0.07292	1	-0.1144	1	-0.068	1	0.43512	0.84005	-0.5048	0.02345	-0.3721	0.59013	0.18087	1
LOC104916205	0.18944	1	-0.0209	1	-0.1137	1	0.05765	1	-0.6349	0.01039	-0.3415	0.62344	-0.2557	1
LOC104916258	-0.5295	0.80143	0.18135	1	0.04196	1	0.022	1	0.64655	0.01528	0.06713	1	-0.086	1
LOC104916269	-0.5511	1	-5.974	1	6.21954	0.63812	6.53161	0.00653	1.16463	0.89609	-6.0172	0.38744	6.41693	0.00764
LOC104916274	0.19941	1	-0.4492	1	0.25321	1	0.42706	1	-1.045	0.00926	-1.106	0.05269	-0.2215	1
LOC104916336	-0.0468	1	0.27123	1	0.17605	1	0.04818	1	0.65596	0.00561	0.42488	0.44246	0.20763	1
LOC104916568	2.80206	0.05017	-0.337	1	-1.4331	1	-1.1046	1	-3.3172	0.00045	0.925	0.8814	0.10768	1
LOC104916581	1.7906	0.93794	2.2456	1	-0.069	1	-0.8345	0.95796	1.07989	0.32926	2.91263	0.02724	-0.1438	1

LOC104916596	0.20049	1	-1.6623	0.42085	-0.6096	1	-0.1858	1	-1.8153	0.00101	-1.0124	0.33895	0.47565	1
LOC104916648	-1.4292	1	-0.4533	1	0.92548	1	0.43138	1	3.23533	0.01072	0.80199	0.98073	1.68677	1
LOC104916674	3.37061	0.73206	4.06231	0.03334	-0.2832	1	-0.635	1	0.67507	0.91051	4.18863	0.00031	-0.5233	1
LOC104916692	-0.5352	0.9806	0.40325	1	0.1908	1	-0.1071	1	1.08482	8.3E-06	0.35054	0.81162	-0.1604	1
LOC104916700	0.0575	1	-0.0198	1	0.30931	1	-0.3725	1	0.94325	0.01092	0.68145	0.51458	0.33608	1
LOC104916701	-0.1074	1	0.06645	1	0.17529	1	0.04271	1	0.61269	0.02866	0.32229	0.79211	0.30222	1
LOC104916704	-0.105	1	-5.9858	1	7.78536	0.05254	9.57864	7E-06	0.26458	1	-8.0494	0.09595	7.87069	4.5E-05
LOC104916705	-0.3258	1	-9.0084	0.4474	8.7746	0.00625	10.0996	3E-06	0.47628	1	-9.0527	0.05925	9.9815	4.3E-06
LOC104916706	0.73214	1	-5.4063	1	6.27062	0.85555	7.3662	0.0006	0.4824	1	-5.4516	0.43674	7.24981	0.0008
LOC104916720	0.25858	1	0.61225	1	0.24397	1	-0.3042	1	1.06392	2.5E-05	1.06862	0.007	0.15875	1
LOC104916782	0.55167	0.86098	0.20117	1	-0.6093	1	-0.0787	1	-0.9916	0.00611	0.15581	1	-0.119	1
LOC104916789	-0.153	1	-7.3609	1	7.62178	0.10835	8.75235	2.1E-05	0.793	0.97473	-7.4043	0.20948	8.63493	3E-05
LOC104916829	0.03177	1	-7.3609	1	7.49225	0.18055	8.33838	0.00026	0.47823	1	-7.4043	0.20948	8.22056	0.0003
LOC104916836	-0.0768	1	-1.0358	1	-0.2132	1	0.2996	1	-1.3206	0.01442	-1.193	0.20429	0.14752	1
LOC104916839	-0.5075	1	-6.3137	1	6.12885	0.46625	7.34341	0.00078	0.69388	1	-6.358	0.32217	7.22735	0.00111
LOC104916864	0.29827	1	0.64908	1	-0.3091	1	-0.6561	0.80094	0.44665	0.4383	1.04644	0.03095	-0.2528	1
LOC104916895	0.47644	1	0.14231	1	-0.0901	1	0.38025	0.92124	-1.1921	5.5E-05	-0.6356	0.32217	-0.3949	1
LOC104916902	-0.2109	1	-7.9385	1	8.23621	0.00368	8.95674	4.8E-05	0.8912	0.94583	-7.9794	0.09814	8.83814	6.3E-05
LOC104916936	-0.3802	1	-0.9293	1	-1.0308	1	-0.0583	1	-1.8769	0.01785	-1.1823	0.61903	-0.3627	1
LOC104916992	0.45681	0.85795	-0.0178	1	-0.1372	1	0.319	1	-1.1547	5.4E-07	-0.567	0.35706	-0.2281	1
LOC104917005	0.19226	1	-0.146	1	0.0592	1	0.04309	1	-0.5876	0.04207	-0.4647	0.35706	-0.2698	1
LOC104917008	-0.6101	1	-0.4429	1	0.07165	1	0.50859	1	1.94663	0.00611	1.22799	0.26671	2.18795	0.01966
LOC104917017	-1.0678	0.91791	-1.3533	1	-1.5257	1	1.64551	0.69859	-2.3894	0.03677	-1.9011	0.11673	1.08852	1
LOC104917042	-0.0436	1	0.18331	1	-0.0181	1	1.30222	1	-2.957	0.02744	-2.9372	0.05639	-1.742	1
LOC104917089	-0.1468	1	0.47512	1	0.02457	1	-0.0152	1	0.61132	0.0262	0.43295	0.53737	-0.0533	1
LOC104917113	-1.0677	1	0.64301	1	0.1712	1	0.35663	1	2.18981	0.01761	0.95068	0.75144	0.65064	1
LOC104917114	-0.3991	1	-0.9831	1	-0.4699	1	1.16011	0.60431	-1.2294	0.04784	-1.1612	0.22028	0.97711	0.78661
LOC104917118	-0.5167	1	-0.6765	1	0.59087	0.62603	-0.198	1	1.01149	0.02915	-0.1054	1	0.38056	1

LOC104917138	0.28905	1	-6.47	1	5.60461	0.12803	6.48905	0.00064	0.80544	0.97744	-4.6507	0.44466	7.87533	0.00019
LOC104917152	0.45292	0.96024	-0.1062	1	0.05071	1	0.20738	1	-0.7369	0.01612	-0.3461	0.66231	-0.0266	1
LOC104917185	-0.0225	1	-5.8546	1	7.21139	0.07747	7.22808	0.00178	1.74765	0.70677	-5.8978	0.40264	7.11415	0.00221
LOC104917199	0.02551	1	-0.3775	1	-0.2235	1	-0.0661	1	-0.6422	0.02439	-0.4017	0.5388	-0.0815	1
LOC104917200	-0.1627	1	-0.566	1	-0.8893	1	0.17116	1	-2.3491	7E-06	-1.6212	0.09814	-0.8797	0.86982
LOC104917240	-0.283	1	-0.0376	1	0.01868	1	-0.1591	1	0.52881	0.04627	0.21888	0.86394	0.10395	1
LOC104917305	-0.1688	1	-0.8784	1	1.15694	1	0.46931	1	-4.5401	0.00105	-5.8926	1E-05	-4.448	0.11492
LOC104917306	0.19399	1	0.68314	1	-0.1589	1	-0.5167	1	1.27368	0.26684	1.58773	0.02592	0.42463	1
LOC104917426	-0.5747	0.56228	-0.511	1	0.0664	1	-0.1	1	-0.1986	0.83372	-0.8495	0.02152	-0.4282	1
LOC104917517	0.06081	1	0.09744	1	0.241	1	-0.0969	1	0.52549	0.02979	0.33735	0.69882	0.14969	1
LOC104917559	0.33955	1	0.29453	1	0.42605	1	-1.1309	0.13304	1.48581	0.00307	1.38536	0.00508	-0.0336	1
LOC104917565	-0.3797	1	-0.0801	1	-0.1607	1	-0.4654	0.94057	0.59549	0.03509	0.36913	0.76658	-0.0118	1
LRIT1	-1.0604	1	-2.9243	1	0.0886	1	0.43967	1	3.27148	2.1E-05	2.06797	0.14365	5.26318	4.3E-07
LRP8	-0.0616	1	0.6637	1	0.41474	1	-0.3949	1	1.01002	0.00666	0.52266	0.76122	-0.5225	0.91697
LRRC30	0.45438	1	0.06536	1	-0.3499	1	0.37566	1	-1.2403	0.0019	-0.4423	0.79106	-0.1264	1
LRRC4C	0.25395	1	-0.6067	1	-1.9757	1	-0.1225	1	-2.2452	0.02735	0.01115	1	0.4996	1
MAP1LC3A	-0.1093	1	-0.2412	1	-0.1349	1	0.18969	1	-0.5544	0.01646	-0.5359	0.37716	-0.1022	1
MAPK10	-0.4393	1	-0.767	1	-1.9454	0.02256	0.28652	1	-1.5909	0.01469	-0.0772	1	0.96747	1
MARCO	-3.2523	0.07098	-1.7826	1	0.20904	1	0.06278	1	1.23827	0.03385	-2.2338	0.28933	-0.375	1
MATN1	2.43123	0.58828	-0.2531	1	-0.7587	1	-0.4631	1	-3.5399	0.00248	-0.3826	1	-0.5869	1
MATN4	0.61447	1	-0.8491	1	-1.6375	0.18055	0.19642	1	-2.3219	7.3E-05	-0.0687	1	0.98088	0.68017
METTL11B	0.23439	1	0.13781	1	-0.5877	1	0.76176	0.88567	-1.3518	0.00821	-0.5375	0.83302	0.08516	1
METTL3	-0.0853	1	-0.0776	1	0.16329	1	-0.3113	1	0.57794	0.04492	0.31752	0.80151	0.09033	1
MFSD2B	-0.4571	1	0.42332	1	-0.0186	1	-0.147	1	1.78261	0.00225	1.33994	0.37387	0.76732	1
MGP	0.34594	1	-0.6128	1	-0.0445	1	0.30886	0.90755	-1.292	3.8E-05	-0.9118	0.01421	0.01623	1
MICU1	0.11743	1	-0.0256	1	-0.125	1	0.06521	1	-0.5409	0.04574	-0.306	0.66008	-0.2097	1
MLF1	0.44989	0.98671	0.00724	1	-0.2078	1	0.62756	0.25963	-0.7653	0.00437	-0.1145	1	0.50913	0.75556
MMD2	0.02758	1	-0.1894	1	0.36075	1	0.30152	1	-0.3889	0.46087	-0.7296	0.03614	-0.2362	1

MMEL1	-0.014	1	-0.6579	1	-0.5549	1	0.22925	1	-1.0524	0.02914	-0.5156	0.72705	0.37131	1
MPND	0.57529	1	-0.255	1	-0.1032	1	0.77033	0.79122	-1.7837	1.6E-05	-1.1135	0.04176	-0.0854	1
MPP1	-0.1667	1	0.02251	1	0.46751	1	0.32483	1	0.65953	0.01411	0.01517	1	0.32692	1
MPP3	0.05189	1	-0.2389	1	-0.1845	1	-0.5784	0.08541	-0.6716	0.00496	-0.4456	0.55786	-0.7778	0.00506
MRAS	-0.1369	1	0.08835	1	0.10441	1	-0.3582	1	0.72794	0.00264	0.47501	0.5215	0.042	1
MSRB3	0.29288	1	-0.0114	1	-0.1022	1	0.19895	1	-0.5998	0.01562	-0.2124	0.88856	0.00092	1
MTERF2	0.0951	1	0.02197	1	-0.2887	1	0.20504	1	-0.7521	0.00403	-0.3769	0.79284	-0.1897	1
MTPP	0.43641	1	0.77893	1	-2.8241	0.40077	-1.6632	0.81152	-2.7249	0.01024	0.58364	0.92894	-1.8416	0.85046
MUC3A	-1.4037	1	0.11522	1	-4.2838	0.53152	-0.4575	1	-4.9817	6.6E-06	-2.1058	0.60378	-2.6438	0.56623
MURC	-0.0876	1	-0.1118	1	-0.4945	1	0.40571	1	-1.1054	0.0009	-0.7041	0.56278	-0.1872	1
MYBPC1	0.59914	1	-0.3918	1	-0.0047	1	-0.333	1	-0.9237	0.00802	-0.3308	0.97359	-0.2603	1
MYH11	0.28074	1	-0.608	1	0.08578	1	0.56278	0.19898	-0.7602	0.04547	-0.574	0.27436	0.60131	0.11214
MYL1	0.16774	1	-0.1483	1	-0.1888	1	0.31815	1	-0.7947	3.4E-05	-0.4439	0.48682	0.02357	1
MYL3	0.49547	1	-0.2806	1	-0.0443	1	-1.0869	0.07031	-1.9611	0.00602	-1.4326	0.49179	-2.2314	0.06361
MYLK2	-0.3117	1	-0.5432	1	-0.4902	1	0.48346	0.94711	-1.1289	0.00307	-0.9582	0.23931	0.07336	1
MYO18B	-0.0435	1	-0.426	1	-0.0982	1	0.33849	0.87436	-0.6222	0.02174	-0.5765	0.17044	0.19218	1
MYO1D	0.30687	1	-0.3041	1	-0.3013	1	-0.0502	1	-0.8588	0.02068	-0.2627	0.96977	0.0009	1
MYOM1	-0.2443	1	-0.2127	1	-0.2812	1	0.34515	1	-0.7027	0.00161	-0.6718	0.25433	-0.1108	1
MYOM2	-0.1247	1	-0.3233	1	-0.2298	1	0.47622	0.69779	-0.5295	0.03216	-0.4294	0.75144	0.3726	1
MYOT	0.4435	1	-0.087	1	-0.205	1	-0.1495	1	-1.0012	0.00028	-0.3591	0.86553	-0.4205	1
MYOZ3	0.13087	1	-0.3107	1	-0.3277	1	0.75278	0.71474	-1.3296	0.00046	-0.8778	0.29617	0.18778	1
NAMPT	-0.341	1	-0.3621	1	-0.2145	1	0.7271	0.41067	-0.7692	0.01481	-0.9037	0.07197	0.1911	1
NAT10	-0.1195	1	0.11704	1	0.1127	1	-0.0813	1	0.7193	0.00042	0.47894	0.41332	0.28588	1
NDUFA1	0.26445	1	-0.2564	1	-0.0072	1	0.28345	0.96082	-0.6626	0.00123	-0.3994	0.44246	0.14482	1
NDUFA4	0.25108	1	-0.153	1	-0.1323	1	0.16862	1	-0.6109	0.0031	-0.2359	0.81761	0.09003	1
NDUFA5	0.08764	1	-0.0151	1	-0.217	1	0.25055	1	-0.6276	0.00524	-0.3307	0.70321	-0.0605	1
NDUFB1	0.21149	1	-0.0376	1	-0.1894	1	0.30871	1	-0.6471	0.00314	-0.2537	0.79093	0.09515	1
NDUFB2	0.29534	1	0.16977	1	-0.0414	1	0.36282	0.78344	-0.5189	0.04492	-0.1897	0.93551	0.00682	1

NDUFB3	0.23622	1	-0.0408	1	-0.0537	1	0.22938	1	-0.549	0.01681	-0.2673	0.72927	0.0071	1
NDUFB7	0.26779	1	-0.003	1	0.00803	1	0.36198	0.77592	-0.5002	0.02403	-0.2487	0.74573	0.11978	1
NDUFB9	0.27928	1	-0.0955	1	-0.1194	1	-0.0015	1	-0.5032	0.04413	-0.1132	1	-0.0147	1
NEDD8	0.34717	1	-0.3954	1	0.00314	1	0.03342	1	-0.6426	0.0069	-0.3076	0.80178	0.12853	1
NEURL1	0.19543	1	0.23918	1	0.36288	1	-0.8759	0.6608	1.34998	0.01788	1.17473	0.21275	0.05468	1
NFATC1	0.34494	1	-0.5206	1	-0.2987	1	-0.1064	1	-1.0795	1.2E-05	-0.4455	0.59151	-0.0256	1
NINJ1	-0.042	1	0.04505	1	0.09873	1	-0.2348	1	-0.6245	0.0262	-0.7729	0.05269	-1.0451	0.00162
NIT1	0.21377	1	0.10284	1	-0.1334	1	0.22022	1	-0.5022	0.04005	-0.1635	0.95723	-0.0419	1
NKD1	0.58415	1	0.93176	1	-0.289	1	-0.7886	0.64129	0.33079	0.8163	1.1967	0.02062	-0.52	1
NMRK2	0.25559	1	0.32751	1	-0.0423	1	1.07413	0.00289	-0.5877	0.05539	-0.2971	0.86653	0.44916	1
NOV	0.60159	1	-1.5073	1	-0.3742	1	0.71125	0.94554	-1.5806	0.00299	-0.6053	0.96565	1.61706	0.00657
NR4A1	0.00819	1	-0.3481	1	-0.1743	1	0.86432	0.18718	-1.0249	0.00215	-0.8498	0.22391	0.36698	1
NRAP	-0.2171	1	-0.8143	1	-0.3307	1	-0.3892	0.86897	-0.9657	0.00399	-0.8593	0.32217	-0.4276	1
NRCAM	0.85007	0.41795	0.43349	1	-0.6532	1	-0.2466	1	-1.0564	0.03544	0.4338	0.71472	-0.2377	1
NRN1L	-0.6597	1	0.16371	1	-0.208	1	-0.1455	1	-1.3241	0.22632	-1.7887	0.00508	-2.0892	0.00394
NUAK2	0.24217	1	0.05421	1	0.45853	1	1.79286	0.91798	-2.0311	0.04707	-2.2269	0.34335	-0.4352	1
NUDT3	0.24623	1	0.07002	1	-0.0623	1	0.43986	0.60431	-0.6176	0.0096	-0.3174	0.70141	0.05623	1
OAF	0.13307	1	0.2509	1	0.18668	1	-0.1185	1	0.56715	0.01012	0.50389	0.16331	0.14022	1
OBSCN	-0.1638	1	-0.4886	1	0.13973	1	0.47481	0.47169	-0.4625	0.17236	-0.7744	0.04718	0.19513	1
ORMDL1	0.28275	1	-0.2772	1	0.07072	1	0.3242	1	-0.8457	0.03939	-0.6398	0.34028	-0.0355	1
OSBPL10	0.34152	1	-0.3302	1	-0.2485	1	-0.1559	1	-0.7916	0.04128	-0.2128	1	-0.0328	1
OSBPL6	-0.0083	1	-0.2149	1	0.00315	1	0.61353	0.44832	-0.7522	0.01394	-0.7746	0.11969	0.05673	1
OST4	0.31294	1	-0.2016	1	-0.1155	1	-0.0017	1	-0.5448	0.01819	-0.1249	1	0.08098	1
P2RY2	0.28631	1	0.0187	1	0.11512	1	0.69019	0.24771	-0.7649	0.00157	-0.6032	0.24335	0.07373	1
P4HA3	1.03411	0.34752	0.68101	1	-0.6329	1	-0.9757	0.02789	-0.6795	0.4333	0.97215	0.00812	-0.6777	0.68017
PA2G4	-0.1171	1	-0.0173	1	0.20899	1	-0.2185	1	0.53028	0.03868	0.19511	0.90521	0.0009	1
PAFAH2	0.24391	1	0.28247	1	-0.1625	1	-0.3813	1	0.66035	0.1482	1.05594	0.01913	0.39845	1
PAIP2B	0.16936	1	0.10989	1	-0.1372	1	-0.0305	1	-0.9662	0.0025	-0.6688	0.35614	-0.8032	0.12612

PAK1IP1	-0.3089	1	-0.0133	1	0.08222	1	0.10869	1	0.74879	0.00307	0.3502	0.69005	0.47491	0.68017
PALLD	0.05217	1	-0.3064	1	-0.2032	1	-0.0305	1	-0.5622	0.0263	-0.314	0.69535	-0.0335	1
PALMD	0.07645	1	-0.2148	1	-0.1845	1	-0.1577	1	-0.7036	0.00474	-0.4523	0.67365	-0.3862	0.9671
PANK3	-0.1913	1	0.2317	1	0.06925	1	-0.0834	1	0.56629	0.03552	0.29432	0.75144	-0.01	1
PAQR3	0.07932	1	0.35018	1	0.36092	1	-0.0262	1	0.59645	0.04865	0.30337	0.82741	-0.0669	1
PARP3	0.56372	0.71282	0.13536	1	-0.0568	1	0.04231	1	-0.9267	0.00302	-0.3177	0.7282	-0.4043	1
PARP9	-0.3167	1	-0.1014	1	0.22452	1	0.12233	1	0.58306	0.03985	0.03331	1	0.26404	1
PCDH17	0.09247	1	0.33961	1	0.3683	1	-0.3681	1	1.50612	0.04221	1.22588	0.30738	0.5311	1
PCMT1	-0.0226	1	-0.0545	1	-0.1152	1	0.29628	0.94924	-0.4759	0.04582	-0.3914	0.47984	-0.0359	1
PCMTD1	-0.8685	1	-0.7849	1	-1.0274	0.42455	-0.1455	1	-1.1575	0.01788	-1.0074	0.46711	-0.361	1
PCP4	0.32755	1	0.01561	1	-1.0026	1	-0.0436	1	-1.8461	0.00264	-0.5183	0.82555	-0.5599	1
PCP4L1	0.95543	1	0.04295	1	-0.7463	1	1.41024	0.29652	-2.1908	0.00981	-0.4987	1	0.87262	1
PCTP	0.12858	1	-0.0846	1	-0.3991	1	0.62697	0.59925	-0.8762	0.01612	-0.3575	0.8107	0.35551	1
PCYOX1	0.05031	1	-0.2573	1	-0.012	1	0.30974	1	-0.5758	0.03677	-0.5206	0.36458	0.0489	1
PDE1C	-0.1654	1	-0.332	1	0.86332	0.0344	0.12454	1	0.63999	0.43082	-0.407	0.84824	0.05897	1
PDE4B	-0.0369	1	-0.206	1	-0.2123	1	0.69006	0.54037	-0.8774	0.00022	-0.71	0.37809	0.18958	1
PDE4C	0.70389	0.47762	-0.0495	1	-0.0049	1	0.68579	0.52802	-1.1315	7E-05	-0.4303	0.68478	0.30663	1
PDE8A	0.22799	1	0.07353	1	-0.1735	1	0.04591	1	-0.6017	0.02074	-0.2098	0.91959	-0.231	1
PDK4	-0.6037	1	-3.1744	0.59133	-1.4494	0.40077	-1.8863	0.0133	-3.7418	0.00157	-2.9081	0.13509	-1.61	0.10831
PDLIM3	-0.3412	1	-1.0023	1	-0.275	1	-0.6642	0.513	-1.0639	0.00642	-1.1376	0.20557	-0.7935	0.15133
PEBP4	-0.1992	1	-0.7788	1	-0.2622	1	0.13996	1	-1.2868	0.00931	-1.2243	0.07661	-0.301	1
PER3	0.83714	0.09798	0.15094	1	-0.1284	1	0.0308	1	-0.7882	0.01785	0.16586	1	0.05091	1
PFDN1	0.28784	1	-0.3947	1	0.04361	1	-0.0441	1	-0.8104	2.4E-05	-0.574	0.13509	-0.2185	1
PFKM	-0.305	1	-0.4636	1	-0.3969	1	0.67277	0.69044	-0.9321	0.00926	-0.8473	0.23042	0.291	1
PFKP	-0.2123	1	0.04478	1	0.20816	1	-0.1514	1	0.72819	0.0015	0.29835	0.75611	0.11009	1
PGM1	-0.1754	1	-0.1927	1	-0.3452	1	0.89545	0.58313	-0.8661	0.01381	-0.7003	0.4542	0.38595	1
PHEX	-1.3351	0.72514	-0.7151	1	-0.1996	1	-2.1985	0.45424	1.71011	0.00373	0.58533	0.97859	-0.8895	1
PHGDH	0.3853	1	0.86582	1	-0.3137	1	-1.1008	0.1633	0.51502	0.40437	1.2053	0.00777	-0.7552	0.88928

PHKG1	-0.1811	1	-0.5386	1	-0.3588	1	0.91457	0.62563	-0.9961	0.01681	-0.824	0.32217	0.62844	1
PHLDA1	0.13991	1	0.21494	1	0.2022	1	-0.1103	1	0.71314	0.01635	0.64166	0.13753	0.32329	1
PI16	0.62714	1	-0.2505	1	0.22627	1	1.39997	0.0828	-1.292	0.01635	-0.8938	0.23992	0.75754	0.61398
PIGC	0.18117	1	0.01944	1	-0.1112	1	0.01595	1	-0.5729	0.04751	-0.2899	0.69494	-0.2865	1
PIK3C2B	0.34298	1	0.03802	1	-0.0567	1	0.29851	1	-0.4703	0.0382	-0.0772	1	0.185	1
PKIA	-0.2115	1	-0.1868	1	-0.3922	1	0.20072	1	-0.7281	0.01072	-0.5549	0.49401	-0.1644	1
PLA2G6	-0.0146	1	-0.3002	1	-0.2251	1	0.12392	1	-0.6381	0.04993	-0.4365	0.66964	-0.008	1
PLAC8	-0.6705	1	-0.2676	1	0.70887	1	0.00047	1	1.2438	0.02811	-0.1603	1	0.10411	1
PLCD3	0.09419	1	-0.6328	1	-0.1176	1	0.21116	1	-0.8428	0.02859	-0.6432	0.52196	0.21072	1
PLIN1	-0.4173	1	-5.0596	0.04263	2.33474	1	0.86327	1	-0.4047	1	-3.1753	0.15151	2.75673	0.00332
PLP1	-0.125	1	-0.0933	1	0.13369	1	0.53534	0.6583	-0.737	0.13719	-1.0092	0.04873	-0.3693	1
PLS1	-0.3527	1	0.46745	1	0.2086	1	-0.2774	1	-0.0907	1	-0.662	0.42081	-1.3977	0.00394
PLSCR1	0.49849	0.73206	-0.1781	1	-0.2441	1	0.18393	1	-0.933	0.00129	-0.1988	0.96885	0.16899	1
PLXDC2	0.10338	1	-0.357	1	-0.2891	1	0.29548	1	-0.7839	0.0024	-0.4003	0.63131	0.25757	1
PLXNC1	-0.6597	0.73206	-0.457	1	0.04637	1	-0.0691	1	0.84211	0.01229	0.12137	1	0.51932	1
PNPLA2	0.89564	0.20573	-0.4262	1	0.00789	1	0.10866	1	-1.5003	0.00045	-0.6204	0.44543	-0.0799	1
PNPO	0.56358	0.42876	0.09044	1	-0.0786	1	0.04167	1	-0.768	0.00481	-0.1357	1	-0.1787	1
POLR3G	0.00706	1	-0.301	1	-0.317	1	-0.3636	1	-0.9731	0.00926	-0.6584	0.45211	-0.7152	0.53507
PPAPDC3	0.01217	1	0.16613	1	-0.3634	1	0.63802	0.90159	-0.6652	0.02747	-0.296	0.94678	0.17613	1
PPL	0.07745	1	-0.5645	1	0.05078	1	-0.2252	1	-1.1465	0.01788	-1.1308	0.2858	-0.7832	0.67012
PPM1L	-0.0084	1	-0.7231	1	-0.2883	1	0.15607	1	-1.2198	0.00071	-0.9486	0.2215	-0.0642	1
PPP1R27	0.02885	1	-0.3402	1	-0.6652	0.98975	0.22081	1	-1.5483	5.6E-11	-0.8616	0.17624	-0.2997	1
PPP1R3A	-0.4233	1	-0.1818	1	-0.4293	1	0.26643	1	-0.7737	0.03411	-0.7729	0.34593	-0.3237	1
PPP2R5A	0.00072	1	-0.206	1	-0.1849	1	0.18553	1	-0.5856	0.04751	-0.4089	0.45808	-0.0124	1
PRIMA1	0.23747	1	0.36596	1	-0.6642	1	-1.0834	0.26037	0.59569	0.22459	1.48614	0.00036	0.04613	1
PRKAB2	-0.222	1	-0.3886	1	0.0564	1	0.53651	0.38822	-0.5395	0.05437	-0.8243	0.04786	0.10452	1
PROKR1	0.10297	1	-0.9691	1	-0.3305	1	0.49514	1	-1.8416	0.02864	-1.4117	0.14412	0.06039	1
PRRT3	0.17394	1	-2.1241	1	-0.9063	1	0.91083	1	-3.0709	0.03383	-1.9496	0.42018	1.08122	1

PTGES	0.58282	0.41795	0.10264	1	-0.3896	1	-0.0475	1	-0.8238	0.00472	0.13843	1	-0.0062	1
PTMS	0.03213	1	0.13649	1	0.18764	1	-0.0056	1	0.49824	0.0334	0.33253	0.64925	0.19798	1
PTP4A1	-0.1053	1	-0.1666	1	-0.0976	1	0.53741	0.54541	-0.7647	0.02074	-0.7806	0.11969	-0.0726	1
PTPN21	0.0847	1	-0.3632	1	-0.1965	1	-0.2088	1	-0.8041	0.0474	-0.5302	0.44543	-0.37	1
PYCR1	0.6017	0.95323	0.86408	1	-0.2545	1	-0.5442	0.94057	0.13075	1	0.97962	0.03243	-0.424	1
RAB4A	0.3053	1	-0.0226	1	0.03859	1	0.04878	1	-0.5663	0.04659	-0.311	0.7189	-0.2322	1
RADIL	0.31594	1	-0.1241	1	-0.3779	1	0.06371	1	-0.9398	0.02864	-0.2589	0.96977	-0.0663	1
RBM19	0.02651	1	0.18963	1	0.12026	1	-0.1107	1	0.62272	0.0158	0.52123	0.32893	0.22486	1
RBP1	-0.0841	1	-0.1567	1	-0.1817	1	-0.0569	1	-1.0779	0.03203	-0.9916	0.33876	-0.8822	0.62872
RBPMS	-0.0612	1	-0.3339	1	0.39254	1	0.49252	0.47099	0.56344	0.06904	0.09965	1	0.93472	0.0014
RCAN1	0.56775	1	-0.7278	1	0.08309	1	0.01598	1	-0.9418	0.04996	-0.4638	0.87473	0.28549	1
REC8	0.54797	1	-3.2807	1	-0.1689	1	1.23935	0.24585	2.24998	0.02915	2.95926	0.00176	6.87517	1.3E-09
RELT	0.52457	1	0.72268	1	0.13048	1	-0.3539	1	0.96697	0.02468	1.35238	0.14722	0.27919	1
REM1	0.6973	0.95323	-0.2961	1	0.13497	1	0.40556	0.81617	-0.9401	0.00096	-0.3852	0.92017	0.32024	1
RFX2	0.47073	0.90107	-0.2834	1	-0.1903	1	-0.2551	1	-0.6798	0.02888	-0.0278	1	0.00403	1
RGS2	-0.2469	1	-0.1439	1	-0.4953	1	-0.1497	1	-1.1034	0.01196	-0.8647	0.42413	-0.8619	0.42689
RGS5	0.33637	1	-0.4521	1	0.06197	1	0.50561	0.43862	-0.7366	0.0382	-0.4717	0.4098	0.49248	0.89737
RHAG	-1.1625	0.41795	-0.4022	1	0.52187	1	1.43234	0.0834	1.55799	8.3E-05	-0.1394	1	1.69526	0.03826
RHOBTB3	0.20802	1	-0.0963	1	-0.2892	1	0.95887	0.53	-0.8584	0.02489	-0.3648	0.96977	0.68606	0.97366
RHPN1	-0.1319	1	0.24689	1	0.20561	1	0.22252	1	0.77315	0.03677	0.42735	0.69301	0.40931	1
RNASEL	0.08014	1	-0.1901	1	-0.1569	1	0.00268	1	0.44703	0.36347	0.67657	0.31803	0.87118	0.03728
RNF182	-0.1151	1	0.40194	1	0.51668	1	0.38574	1	1.88262	0.01883	1.22757	0.32964	1.20988	0.75556
RNF207	0.53975	0.95323	0.30928	1	-0.2796	1	0.69761	0.72079	-1.0424	0.00014	-0.2287	0.97693	0.15544	1
ROMO1	0.33527	0.9837	-0.0926	1	-0.096	1	0.20345	1	-0.5756	0.01174	-0.1533	0.96875	0.14829	1
RPA3	-0.0842	1	0.545	1	0.34576	1	-0.0249	1	0.82658	0.00728	0.39025	0.83723	-0.177	1
RPL22	0.14541	1	-0.2235	1	-0.0931	1	0.01335	1	-0.5675	0.00839	-0.3386	0.56446	-0.0952	1
RPL23	0.17028	1	-0.2164	1	-0.116	1	0.09769	1	-0.6099	0.00327	-0.3329	0.55856	-0.0132	1
RPL27	0.04325	1	-0.1938	1	-0.1441	1	0.05268	1	-0.4876	0.04292	-0.3091	0.66304	-0.0575	1

RPL31	0.00022	1	-0.3649	1	-0.1707	1	0.07686	1	-0.5809	0.02074	-0.4189	0.43673	0.02857	1
RPL34	0.08917	1	-0.2481	1	-0.2412	1	0.07381	1	-0.6088	0.01334	-0.2876	0.72288	0.03972	1
RPL36	0.11627	1	-0.2894	1	-0.1239	1	0.02287	1	-0.5691	0.00706	-0.3382	0.55663	-0.0197	1
RPL37	0.04645	1	-0.3251	1	-0.1888	1	-0.1661	1	-0.6521	0.00342	-0.4254	0.44543	-0.2593	1
RPL37A	0.13222	1	-0.3293	1	-0.1125	1	0.11763	1	-0.5972	0.00481	-0.3615	0.5354	0.091	1
RPLP1	0.06314	1	-0.1644	1	-0.3069	1	0.00779	1	-0.7156	0.00906	-0.3554	0.70446	-0.1771	1
RPS10	0.07262	1	-0.2432	1	-0.1644	1	0.09793	1	-0.5763	0.01019	-0.3484	0.57574	-0.0016	1
RPS15	-0.0092	1	-0.1994	1	-0.2095	1	0.07816	1	-0.5313	0.03936	-0.3404	0.64787	-0.057	1
RPS21	0.15589	1	-0.3362	1	-0.1531	1	-0.0076	1	-0.7004	0.00058	-0.4011	0.46061	-0.067	1
RPS28	0.18895	1	-0.3365	1	-0.1288	1	0.23316	1	-0.7973	0.00073	-0.4886	0.30823	0.08567	1
RPS29	0.24973	1	-0.1936	1	-0.0959	1	0.02199	1	-0.6183	0.0028	-0.2819	0.73173	-0.0613	1
RPS3A	0.04947	1	-0.1839	1	-0.1085	1	0.00916	1	-0.5055	0.02384	-0.3575	0.55757	-0.158	1
RPS6KA3	0.09984	1	-0.2518	1	0.03457	1	0.1209	1	-0.6093	0.01488	-0.5529	0.15918	-0.1747	1
RPS6KB2	0.33331	0.95746	0.13264	1	-0.0379	1	-0.0133	1	-0.4846	0.03631	-0.1218	1	-0.2628	1
RRAD	0.7727	1	-0.1798	1	-0.1702	1	-0.8116	0.26121	-1.457	0.03631	-0.5319	0.84557	-1.1541	0.0034
RUNX1	-0.6915	1	-0.9702	1	0.55454	1	-1.0609	0.82295	2.438	8.7E-05	1.1869	0.34372	1.09239	1
SCARA5	0.48289	1	-0.4597	1	0.21528	1	0.58606	0.82966	-1.2157	0.00222	-0.9574	0.01805	0.08949	1
SCN4B	0.11114	1	-0.2476	1	0.03084	1	0.09148	1	-0.5596	0.04238	-0.4892	0.32285	-0.1429	1
SCNN1A	-0.5976	1	-0.0439	1	0.45642	1	1.12306	0.00023	0.64454	0.27175	-0.4146	0.92821	0.75712	0.15302
SCX	1.82899	0.18124	1.06813	1	-1.2895	0.31074	-1.2163	0.14771	-1.6345	0.10393	1.48432	0.01027	-0.8109	1
SDHA	-0.0397	1	-0.176	1	-0.1494	1	0.10614	1	-0.5104	0.03232	-0.4088	0.44604	-0.122	1
SELENBP1	-0.0727	1	-0.7305	1	-0.158	1	0.39362	0.94414	-1.0779	0.02996	-1.0029	0.13456	0.12867	1
SERINC2	0.55715	0.47762	0.21834	1	-0.009	1	0.42278	0.65387	-0.8558	0.00041	-0.2983	0.76417	-0.0902	1
SERPINB5	-0.2051	1	-0.8432	1	0.2607	1	1.87342	0.17211	-0.0381	1	-0.4948	1	2.18957	0.03728
SERPIND1	0.24502	1	-0.8221	1	-0.1504	1	0.02592	1	-1.3333	0.00324	-0.9452	0.19831	-0.0908	1
SGCD	-0.0231	1	-0.1175	1	-0.0776	1	-0.0155	1	-0.7191	0.0025	-0.6726	0.12461	-0.5664	0.15302
SGCG	-0.1189	1	-0.2352	1	-0.3185	1	0.23868	1	-0.6704	0.00234	-0.4785	0.40028	0.00092	1
SGPP1	-0.0253	1	-0.0874	1	0.27631	1	-0.1728	1	0.57274	0.00644	0.26119	0.71253	0.18274	1

SH3BGR	0.02826	1	0.01487	1	-0.1721	1	0.30383	1	-0.557	0.04589	-0.3628	0.69535	-0.0717	1
SH3GL3	-0.1043	1	0.36099	1	0.42598	1	-0.1125	1	0.95833	0.00526	0.41926	0.71253	-0.0444	1
SIRT4	-0.0484	1	-0.0643	1	-0.2638	1	0.19759	1	-0.9193	0.00714	-0.7119	0.20875	-0.4432	0.99504
SLC1A4	0.32675	1	0.97408	1	-0.4823	1	-0.6746	0.94711	0.45259	0.70083	1.25981	0.01209	-0.3865	1
SLC20A2	0.13027	1	-0.5483	1	-0.4393	1	-0.0562	1	-1.2632	0.00018	-0.7025	0.42715	-0.2051	1
SLC22A4	-0.079	1	0.23522	1	0.16981	1	-0.0447	1	1.01741	0.00381	0.7576	0.19687	0.48847	1
SLC25A34	0.07028	1	-0.3455	1	-0.3378	1	0.08972	1	-1.2717	0.00529	-0.8718	0.25232	-0.4339	1
SLC25A37	-0.0759	1	0.05385	1	0.44111	1	0.13481	1	0.80196	0.04464	0.27465	0.96977	0.36343	1
SLC25A4	0.08922	1	-0.0895	1	-0.3102	1	0.61006	0.82966	-1.0751	0.00248	-0.6819	0.34769	0.01834	1
SLC25A48	-0.4789	1	0.37922	1	0.18082	1	0.09698	1	0.9986	0.00421	0.33516	0.82896	0.05625	1
SLC27A1	0.17137	1	-0.9024	1	-0.1203	1	-0.047	1	-1.361	0.00269	-1.0841	0.41153	-0.2249	1
SLC30A10	-0.6391	1	-0.5386	1	0.6768	1	0.45432	1	1.25825	0.03065	-0.0601	1	0.93392	1
SLC37A4	-0.4028	1	-0.2367	1	-0.2924	1	1.11878	0.33518	-0.8273	0.03362	-0.9412	0.17268	0.41346	1
SLC41A3	0.6332	0.34115	0.17165	1	0.09469	1	0.38456	1	-0.9524	0.00055	-0.4226	0.57747	-0.2057	1
SLC48A1	0.1295	1	-0.298	1	-0.0075	1	0.3337	0.95073	-0.5366	0.01785	-0.4081	0.4542	0.22735	1
SLC5A3	-0.2043	1	-0.1125	1	0.64935	0.62603	0.34075	1	0.80456	0.01925	-0.0657	1	0.39896	1
SLC6A15	-0.0752	1	1.41574	1	0.44752	1	-0.0357	1	1.74249	0.00882	1.21835	0.59013	-0.2162	1
SLC7A1	0.25671	1	0.69264	1	-0.4237	1	-0.4761	0.99224	0.39588	0.44679	1.07207	0.02004	-0.0938	1
SLN	0.36292	0.95746	-0.1813	1	-0.0395	1	0.36638	0.97534	-0.7136	0.0007	-0.3181	0.74547	0.23285	1
SMIM11	0.05773	1	-0.3093	1	-0.106	1	0.12951	1	-0.5148	0.02172	-0.3605	0.51912	0.08359	1
SMIM8	0.16247	1	-0.2051	1	-0.1608	1	-0.0323	1	-0.6529	0.00479	-0.3368	0.64292	-0.1612	1
SMOC2	0.15782	1	-0.3454	1	-0.1998	1	-0.3661	0.99224	-0.7866	0.00906	-0.4378	0.58265	-0.4548	0.89465
SMPX	0.25561	1	0.04184	1	0.04133	1	0.05822	1	-0.6232	0.02796	-0.4146	0.54574	-0.3945	0.86982
SNRNP35	0.03056	1	-0.2797	1	-0.0831	1	0.1002	1	-0.6292	0.00837	-0.5241	0.35808	-0.1384	1
SNTB1	0.10414	1	-0.0904	1	-0.0482	1	0.10833	1	-0.7141	0.00699	-0.5702	0.29545	-0.3667	0.88113
SNX22	0.2846	1	-0.2677	1	-0.3542	1	0.08145	1	-1.2339	0.02676	-0.5928	0.84262	-0.248	1
SPC25	0.02269	1	0.17635	1	0.11998	1	-0.3902	0.77592	0.6101	0.04358	0.50198	0.37717	-0.0547	1
SREBF2	-0.4177	1	0.13153	1	0.00274	1	-0.0379	1	0.6813	0.03677	0.25199	0.95246	0.09195	1

SRPX	0.37909	1	-0.1115	1	-0.0968	1	-0.1629	1	-0.5881	0.02926	-0.1201	1	-0.168	1
ST6GALNAC4	0.15075	1	-0.2494	1	-0.0413	1	0.11192	1	-0.739	0.01513	-0.5575	0.43673	-0.1862	1
ST6GALNAC6	-0.039	1	-0.3135	1	-0.2436	1	0.69172	0.58208	-1.0716	0.04178	-0.8755	0.22028	0.1335	1
STC2	0.24425	1	0.60678	1	-0.0688	1	-0.2453	1	0.58663	0.1283	0.88998	0.00176	0.04623	1
STOML3	-0.9717	1	-0.3825	1	-0.376	1	2.33191	0.03427	-2.4404	0.0621	-3.0202	0.03995	-0.3157	1
SUCLG1	-0.0507	1	0.09659	1	-0.3273	1	0.20218	1	-0.4932	0.04993	-0.2225	0.94716	-0.1155	1
SUN3	0.30707	1	0.37159	1	-0.3373	1	-0.2219	1	-0.7253	0.0025	-0.0911	1	-0.6765	0.10309
SYNGR2	0.07812	1	-0.2956	1	0.00069	1	0.26683	1	-0.5888	0.00623	-0.5208	0.25433	0.04638	1
SYNPO2L	0.18488	1	-0.5194	1	-0.0479	1	-0.2734	1	-0.7825	0.01668	-0.5582	0.4447	-0.3067	1
SYT6	0.32148	1	-0.2877	1	-0.7624	1	-0.1151	1	-1.35	0.02427	-0.266	1	-0.0875	1
SYT8	-0.1478	1	-1.6256	1	0.03502	1	1.78329	0.76591	2.91842	0.14655	2.68122	0.38448	5.50853	0.01286
TACR2	0.22963	1	-0.7169	1	-0.0653	1	0.26874	1	-1.946	0.00347	-1.6633	0.08911	-0.6599	1
TAGLN	0.25112	1	-0.9669	1	0.29763	1	1.01923	0.01408	-0.7378	0.10212	-0.7905	0.41406	1.20016	3E-05
TBC1D2	0.13167	1	-0.0713	1	-0.2404	1	-0.3028	1	-0.9363	0.00084	-0.5728	0.29642	-0.7937	0.15655
TBX15	0.21331	1	-0.0527	1	-0.3215	1	0.14907	1	-0.6544	0.00276	-0.1274	1	0.07962	1
TCAP	0.32632	1	-0.6047	1	0.25681	1	0.15661	1	-0.7724	0.03203	-0.7114	0.25794	0.05569	1
TCEA3	-0.3542	1	-0.7961	1	-0.3455	1	0.37828	1	-1.3524	0.04784	-1.3726	0.23897	-0.1924	1
TCP11L2	-0.2853	1	-0.6389	1	-0.5797	1	0.14645	1	-1.1244	0.02915	-0.8397	0.46058	-0.0461	1
TEKT1	0.14005	1	-0.1499	1	-0.052	1	0.72995	0.14221	-0.6933	0.00621	-0.5092	0.43103	0.37478	0.92542
THBS2	0.79029	1	0.33204	1	-0.745	1	-1.31	0.01074	-0.3749	0.86371	1.1505	0.00812	-0.4865	0.73535
TIMP4	-0.0368	1	-1.4836	0.48665	-0.5835	1	0.08282	1	-1.4686	0.00234	-0.9395	0.45048	0.64092	0.6506
TJP3	-0.005	1	-0.3314	1	-0.2703	1	0.23209	1	-0.7867	0.03778	-0.5294	0.75124	0.04276	1
TM6SF1	0.2464	1	-0.3422	1	-0.0579	1	-0.1859	1	-0.5484	0.04128	-0.2532	0.84784	-0.0902	1
TMBIM1	0.11675	1	-0.3714	1	-0.0993	1	-0.0943	1	-0.4889	0.04492	-0.2831	0.76245	0.00032	1
TMEM109	0.38008	0.95746	-0.1622	1	-0.1836	1	0.09582	1	-0.9982	3.1E-05	-0.4421	0.45202	-0.1791	1
TMEM182	0.37201	0.96024	0.0012	1	-0.0615	1	0.11303	1	-0.6708	0.0272	-0.2442	0.87576	-0.1303	1
TMEM200A	0.0832	1	0.24199	1	0.11789	1	-0.2012	1	0.74008	0.02773	0.69452	0.05269	0.25993	1
TMEM233	-0.4456	1	0.14345	1	-0.23	1	-0.4098	0.70305	-0.2229	0.82936	-0.4486	0.72909	-0.9924	0.03832

TMEM82	0.13918	1	-0.4028	1	-0.2764	1	0.18389	1	-1.2451	0.00238	-0.8386	0.42018	-0.2494	1
TMOD1	-0.2653	1	0.08497	1	-0.3655	1	0.03705	1	-0.8978	0.00084	-0.8045	0.22647	-0.8448	0.07247
TNMD	1.52331	0.12797	0.57626	1	-1.8489	1.9E-13	-1.7157	9.9E-12	-1.3148	0.09888	2.04503	1.7E-21	-0.2435	1
TNNC2	0.34267	1	-0.1047	1	-0.0342	1	0.22696	1	-0.6003	0.006	-0.2306	0.86459	0.10311	1
TNNI2	0.28807	1	-0.0823	1	-0.0927	1	0.14667	1	-0.5694	0.01002	-0.1951	0.94405	0.03556	1
TNNT3	0.18977	1	-0.0857	1	-0.051	1	0.19905	1	-0.5256	0.02744	-0.2915	0.74612	-0.0044	1
TOB1	0.04585	1	-0.065	1	-0.1189	1	0.45448	0.73921	-0.5335	0.01827	-0.375	0.66682	0.14557	1
TOM1	0.05673	1	-0.3659	1	-0.1378	1	0.00155	1	-1.1708	0.0042	-0.9865	0.14365	-0.612	0.30671
TP53I3	-0.054	1	-0.2717	1	-0.1984	1	0.31171	1	-0.7584	0.03441	-0.6223	0.32217	-0.0364	1
TPPP	0.12727	1	0.02118	1	-0.5565	1	0.54351	1	-1.451	0.01394	-0.7745	0.42018	-0.2474	1
TPPP3	0.72117	0.95279	0.55343	1	-0.549	1	0.79037	0.78152	-1.8869	2.7E-05	-0.6233	0.66008	-0.3795	1
TRHR	-1.4732	1	-1.5608	1	0	1	2.40276	1	-4.1006	0.30454	-5.3613	0.04176	-0.8671	1
TRIM63	-0.6881	1	-0.7922	1	-0.2568	1	0.28662	1	-0.6873	0.00835	-1.1288	0.22741	-0.0412	1
TRIM7	0.42237	1	-0.095	1	-0.194	1	0.40694	1	-1.1784	0.00294	-0.5717	0.7229	-0.0639	1
TRIM71	0.84135	0.59989	0.68691	1	0.07939	1	-0.4823	0.62521	0.67073	0.26747	1.41836	2.2E-07	0.25751	1
TRIP13	-0.0187	1	0.19452	1	0.33261	1	-0.2631	1	0.90601	0.00297	0.54452	0.48682	0.09288	1
TSPAN2	0.43173	1	-0.2757	1	-0.0706	1	0.54728	0.73921	-1.0624	0.00221	-0.567	0.48992	0.26174	1
TSPAN32	-0.7348	1	-0.4539	1	1.35328	1	1.30448	0.45424	1.3764	0.03239	-0.7303	0.71942	1.02939	1
TSPO2	-1.1109	0.48226	-0.0141	1	0.48386	1	0.35545	1	1.85272	1.4E-08	0.24575	1	0.62375	1
TTN	0.07688	1	-0.2279	1	-0.0255	1	0.35463	0.94037	-0.5436	0.01924	-0.4488	0.45264	0.13743	1
TTPA	0.17793	1	-0.507	1	-0.398	1	-1.2267	0.01357	-1.2684	0.01878	-0.7046	0.73126	-1.4135	0.02614
TXNIP	0.13974	1	-0.6037	1	-0.2954	1	0.1825	1	-0.6658	0.03985	-0.2406	1	0.54774	1
UBA52	0.06195	1	-0.3238	1	0.01935	1	0.05192	1	-0.4889	0.03889	-0.4557	0.35555	-0.0742	1
UBALD1	-0.1171	1	-0.6721	1	-0.6917	0.82326	-0.0761	1	-1.2831	0.00146	-0.7188	0.56678	-0.1156	1
UBASH3B	-0.2686	1	0.02815	1	0.04909	1	-0.2262	1	0.74741	0.00018	0.42043	0.38645	0.17361	1
UGP2	0.11559	1	-0.0511	1	-0.0565	1	0.32997	0.97732	-0.7275	0.00103	-0.5644	0.17737	-0.1798	1
UPK1B	-0.9068	1	1.05223	1	1.25475	1	-0.5324	1	2.81867	8.7E-05	0.62977	0.89774	-0.9459	1
VEPH1	1.51442	0.60542	1.38386	1	0.7866	1	-1.5367	0.00315	1.81827	0.05335	2.51525	1.8E-08	-0.395	1

VSTM4	-0.1139	1	0.39072	1	0.33632	1	-0.0961	1	0.83086	0.00215	0.36988	0.5354	-0.1089	1
VTN	-0.5766	1	-0.4779	1	0.64582	1	0.37534	1	-0.8358	0.28541	-2.0783	0.02491	-1.2091	0.32106
WDFY2	0.36067	1	0.33078	1	0.00215	1	0.02757	1	0.54378	0.18051	0.89059	0.03433	0.59658	0.72821
WDR83OS	0.27456	1	-0.2013	1	-0.1429	1	0.18751	1	-0.7544	8.7E-05	-0.3455	0.48856	0.04786	1
WFIKK2	-0.732	1	0.0158	1	0.0883	1	-1.043	0.94643	1.63096	0.04625	0.79524	0.70355	-0.2574	1
WISP2	0.41499	1	-0.2317	1	-0.9559	1	0.41122	1	-1.4609	0.0281	-0.0965	1	0.55729	1
WNT5B	0.02021	1	-0.5543	1	-0.2563	1	0.27425	1	-0.8575	0.04766	-0.5962	0.49096	0.23971	1
WNT7A	0.58133	1	0.5247	1	0.37845	1	-1.7428	0.49078	2.48373	0.04707	2.63283	0.02673	0.35689	1
WNT8B	0.04172	1	-0.0227	1	0.50611	1	1.11348	0.00353	0.04039	1	-0.4316	0.67468	0.70384	0.75364
YBX3	0.02745	1	-0.2646	1	-0.0395	1	0.25876	1	-0.6262	0.008	-0.5671	0.20902	-0.0402	1
YIPF7	0.17261	1	-0.0232	1	-0.0574	1	0.35305	1	-0.528	0.03224	-0.3056	0.75567	0.0718	1
YPEL2	-0.0324	1	-0.3422	1	-0.3056	1	0.13021	1	-0.8024	0.00051	-0.5383	0.22432	-0.0598	1
YTHDF3	-0.0977	1	-0.3586	1	-0.1699	1	-0.0441	1	-0.6377	0.02068	-0.5758	0.40181	-0.2541	1
ZFPM1	-0.3377	1	-0.0359	1	0.51433	1	-0.5095	1	1.40803	0.00016	0.54706	0.74205	0.07941	1
ZMAT4	0.25756	1	-0.222	1	-0.0892	1	-0.001	1	-1.4428	0.02053	-1.1003	0.28314	-0.8713	0.75556
ZNF865	0.09479	1	-0.0633	1	0.20674	1	-0.3252	1	0.50636	0.03868	0.38383	0.72126	0.12928	1